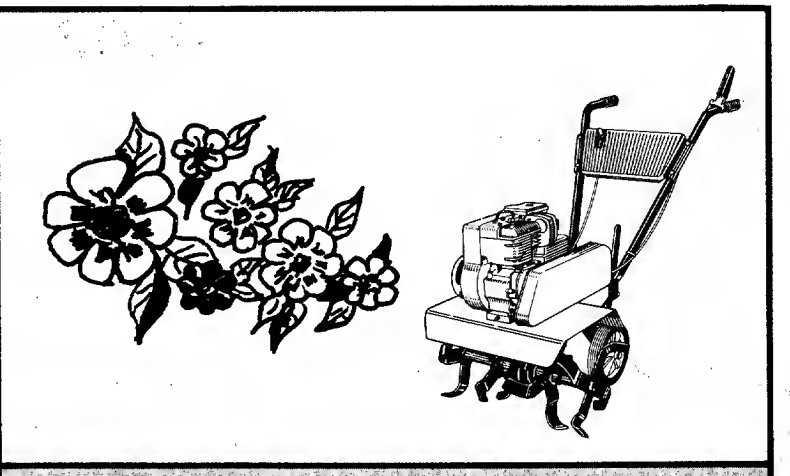
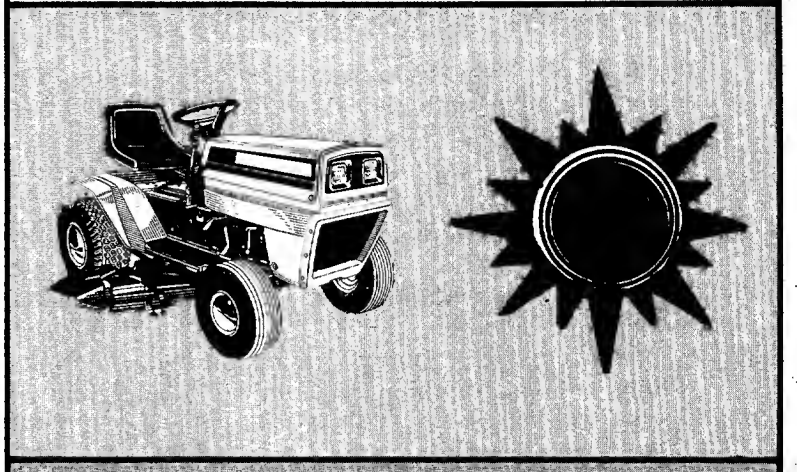
.75

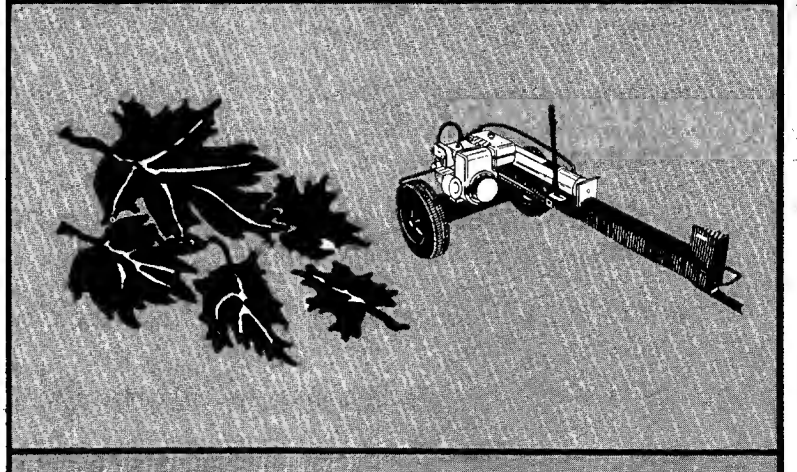
OWNER'S MANUAL



34″ LAWN TRACTORS



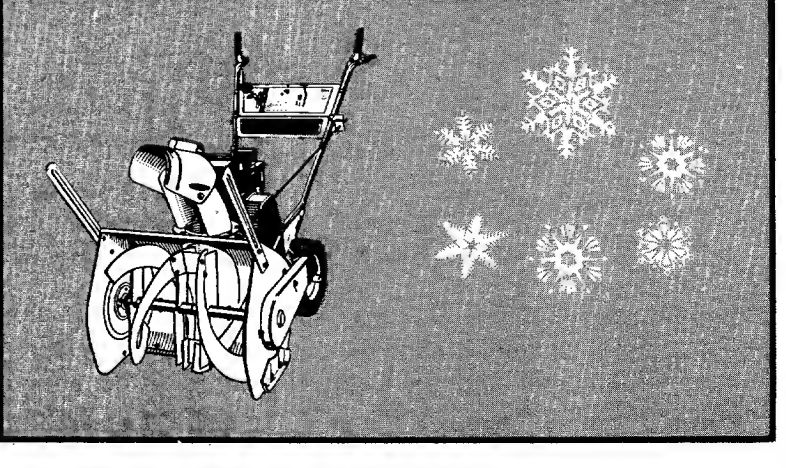
Model Numbers
132-465A
132-466A
132-465-300
132-466-300



Important:

Read Safety Rules and Instructions Carefully

Thank you for purchasing an American built product.



PRINTED IN U.S.A

FORM NO. 770-1752

INDEX

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

TO PURCHASERS
OF INTERNAL COMBUSTION ENGINE EQUIPPED
MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop quickly—READ THIS OWNER'S MANUAL.
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
6. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
7. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
8. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
9. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
10. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury.
11. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
12. Stop the blade(s) when crossing gravel drives, walks or roads.
13. Disengage all attachment clutches and shift into neutral before attempting to start engine.
14. Disengage power to attachment(s) and stop engine before leaving operating position.
15. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
16. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
17. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
18. Disengage power to attachment(s) when transporting or not in use.
19. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
20. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face.
21. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
22. Stay alert for holes in terrain and other hidden hazards.
23. Use care when pulling loads or using heavy equipment.
    A. Use only approved drawbar hitch points.
    B. Limit loads to those you can safely control.
    C. Do not turn sharply. Use care when backing.
    D. Use counterweight(s) or wheel weights when suggested in owner's manual.
24. Watch out for traffic when crossing or near roadways.
25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
26. Handle gasoline with care. It is highly flammable.
    A. Use approved gasoline container.
    B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
    C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.
27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in owner's manual.
28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.

29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
30. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
31. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
32. Do not change the engine governor settings or overspeed the engine.
33. When using the vehicle with mower, proceed as follows:
    (1) Mow only in daylight or in good artificial light.
    (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
    (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
    (4) Check blade mounting bolts for proper tightness at frequent intervals.
34. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
35. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up.

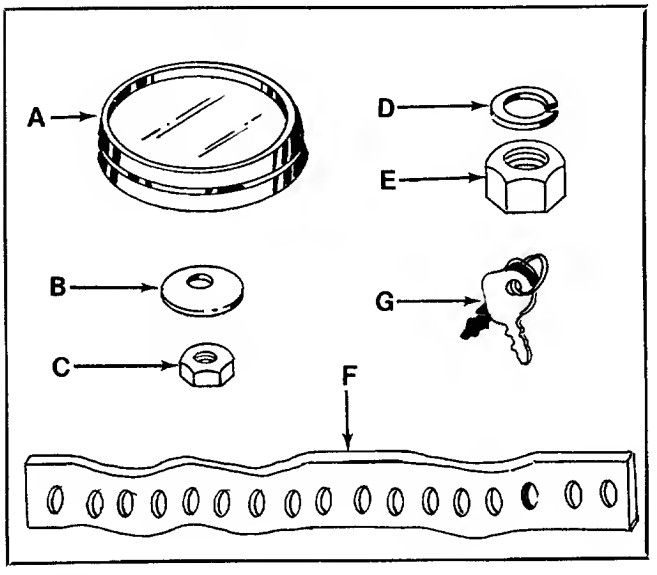


FIGURE 1.

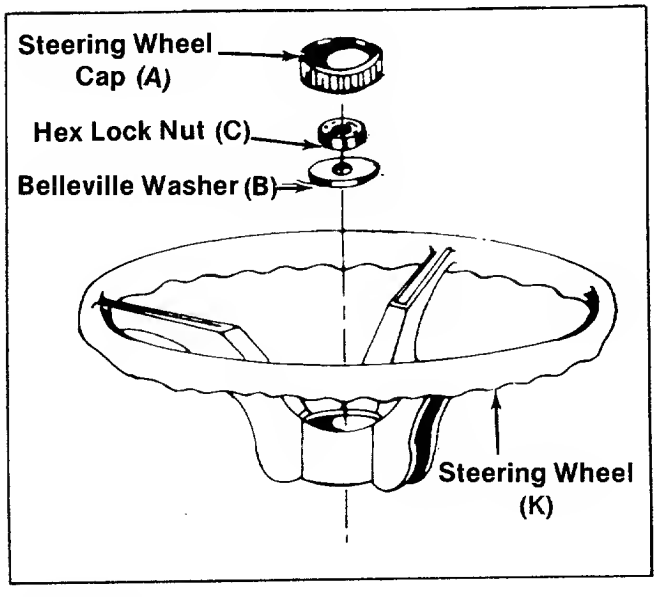


FIGURE 2.

ASSEMBLY INSTRUCTIONS

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

Tools Required:

(1) 7/16" Open End or Box Wrench
(1) 1/2" Open End or Box Wrench
(1) 3/4" Open End or Box Wrench
(1) Adjustable Wrench

Contents of Hardware Pack:

(See Figure 1)

A (1) Steering Wheel Cap
B (1) Belleville Washer
C (1) Hex Lock Nut 5/16-18 Thread
D (1) Lock Washer ½" I.D.
E (1) Hex Nut 1/2-13 Thread
F (1) Battery Strap
G (2) Ignition Keys
H (1) Battery Pack (Not Shown)
I (4) Foam Strips (Not Shown)

Loose Parts in Carton:

J (1) Seat
K (1) Steering Wheel

NOTE

Reference to right-hand or left-hand side of machine is from the driver's seat facing forward.

1. Remove the lawn tractor and all parts from the carton. Make certain that all loose parts and literature have been removed before the carton is discarded.
2. Place steering wheel (K) over steering shaft.
3. Secure with belleville washer (B) and hex lock nut (C). See figure 2.
4. Press the steering wheel cap (A) on the steering wheel by hand. See figure 2.

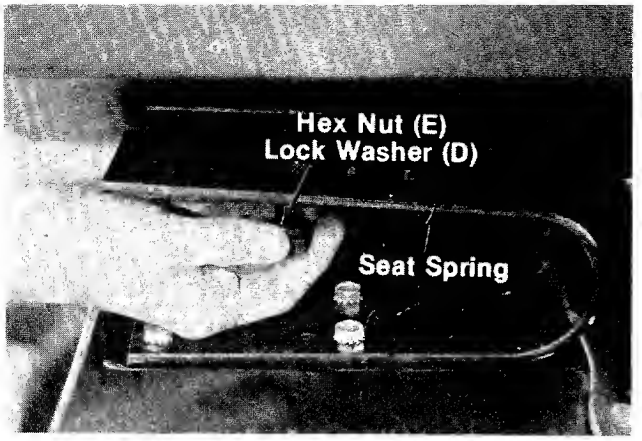


FIGURE 3.

5. Your molded seat comes with the mounting bolt molded in the seat.
   A. Select one of three hole locations on seat spring.
   B. Place seat on spring and secure with lock washer (D) and hex nut (E). See figures 1 and 3.

NOTE

Check ALL nuts and bolts for correct tightness.

BATTERY INFORMATION

WARNING

A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*

B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.

C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.

D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.

E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.

F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.

G. As a further precaution, only charge the battery in a well-ventilated area.

***Always shield eyes, protect skin and clothing when working near batteries.**

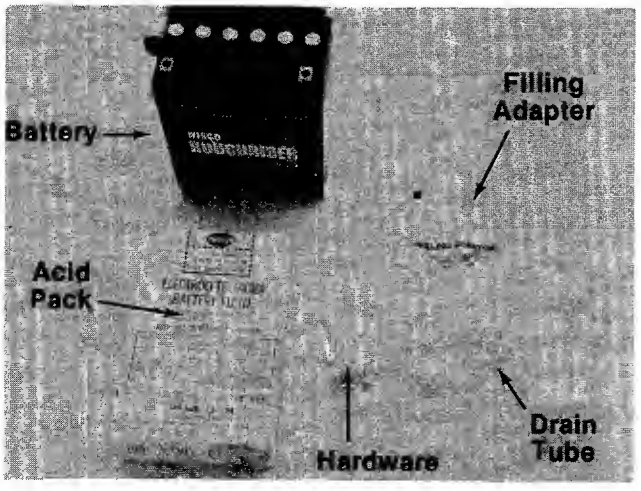


FIGURE 4.

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware. See figure 4.

DANGER

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

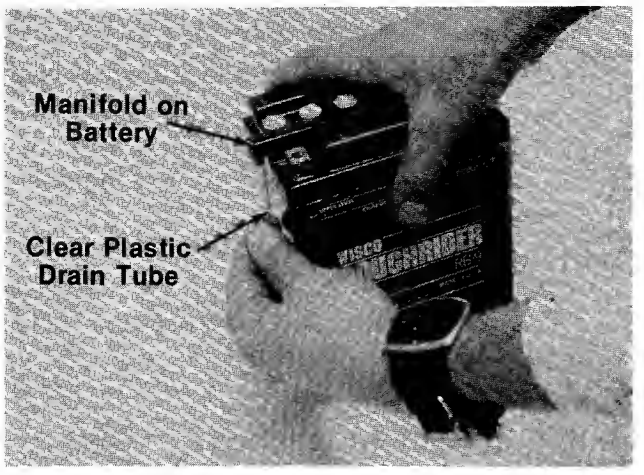


FIGURE 5.

2. Place the battery on table or workbench to be filled.
3. Place one end of clear plastic drain tube on manifold of battery. See figure 5.

NOTE

Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

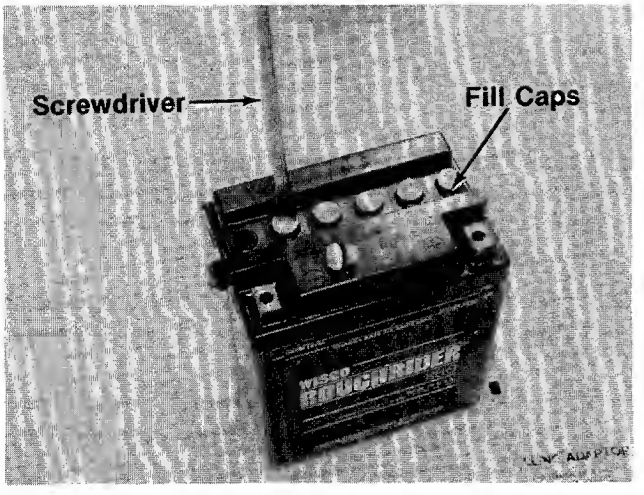


FIGURE 6.

4. Remove the six fill caps from the top of the battery with a screwdriver. Care should be taken not to damage the fill caps. See figure 6.

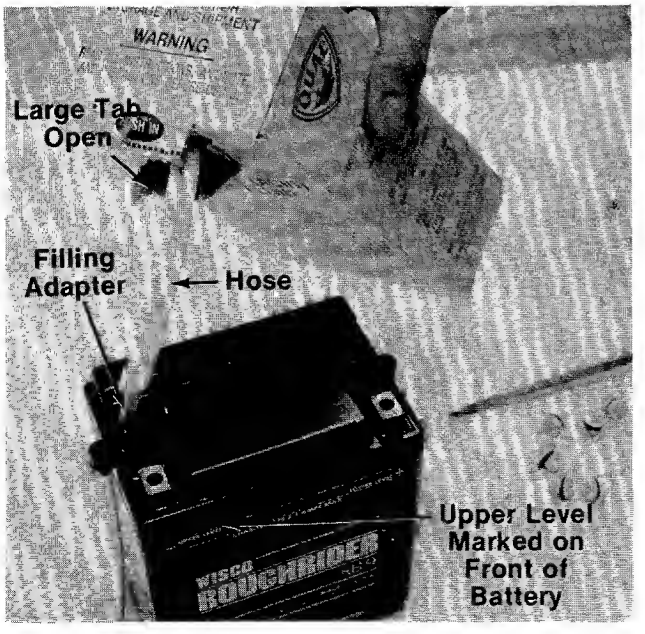


FIGURE 7.

5. Lay acid package down, with "push in" facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use a sharp tool or object to open acid package.
6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 7.
7. Fill each cell to upper level marked on front of battery. Replace fill caps on battery. See figure 7.
8. Allow battery to sit for 20 to 30 minutes. Add additional acid, if necessary, to bring it up to the proper level.

WARNING

Battery contains sulfuric acid. Refer to warning on page 5. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!

9. The battery can be charged after the 20 to 30 minutes sitting period. The battery can be slow charged (do not fast charge) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

NOTE

Charging rate after battery has been put into operation: The battery is to be charged for a period of 14-16 hours. NO LONGER THAN 30 HOURS.

CAUTION

After battery has been in service, add only distilled water. DO NOT ADD ACID.

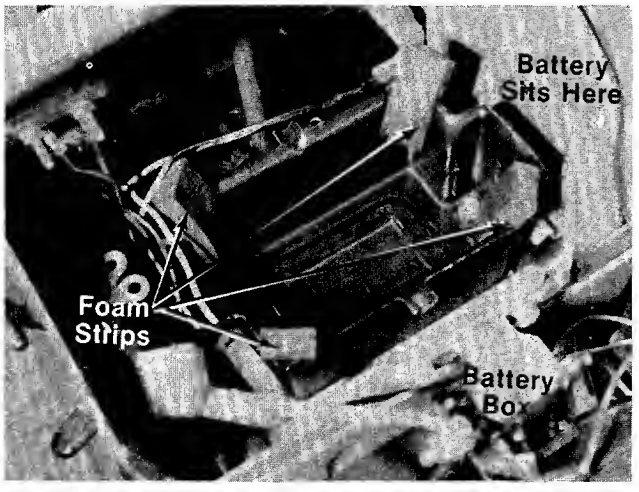


FIGURE 8.

10. Open the hood of the lawn tractor. Figure 8 shows the battery box in which the battery will be mounted.
11. Install the four foam strips into the battery box as follows.
    A. Using a cloth, clean the inside of the battery box with a thinner or solvent.
    B. Peel the paper off the foam strips to expose the adhesive backing. Press foam strips firmly into the corners of the battery box. See figure 8.

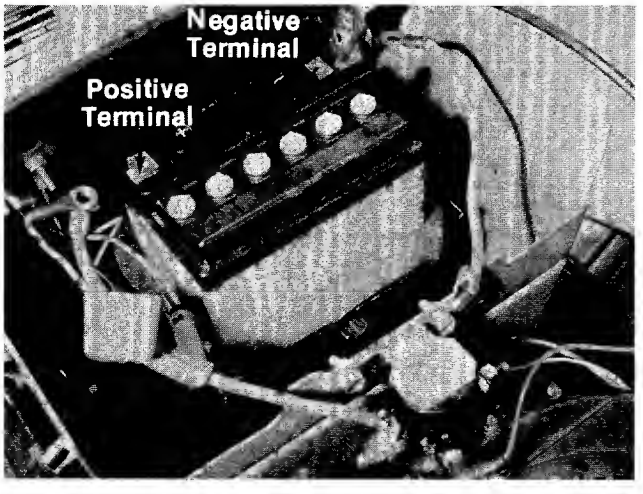


FIGURE 9.

12. Place the battery in the rider so that the positive terminal is towards the **right** side of the unit. See figure 9.

NOTE

Right and left hand side of the unit is determined by sitting on the seat in the operating position, facing forward.

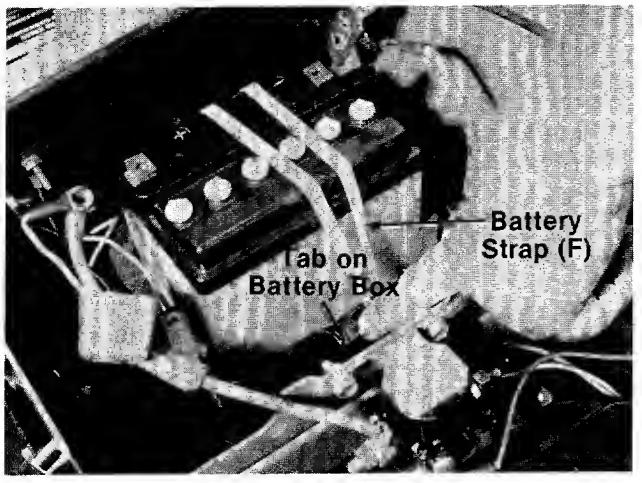


FIGURE 10.

13. Secure the battery to the battery box by stretching the battery strap (F) provided across the battery. Loop each end around the tab on the sides of the battery box. See figure 10.

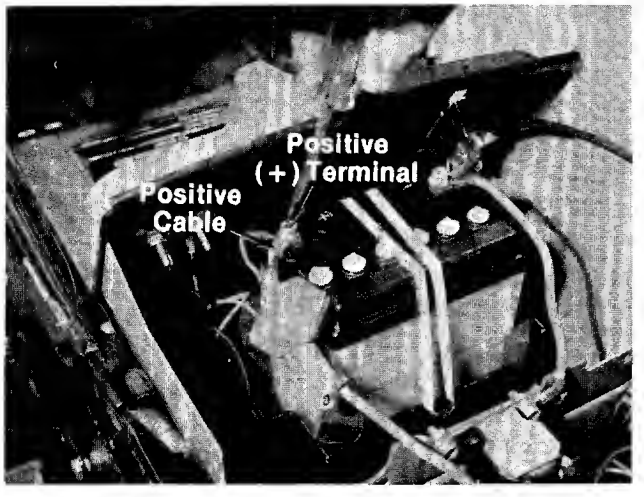


FIGURE 11.

14. Slide the square nut (provided with battery hardware) into the positive (+) terminal. Slide back the rubber boot which is on the positive cable. Place the positive (heavy red wire) cable and the small red wire (with a fuse holder in it) on the positive terminal. Secure with screw and lock washer provided. See figure 11.
15. Slide the square nut (provided with battery hardware) into the negative (−) terminal. Place the negative (heavy red wire) cable on the negative terminal. Secure with screw and lock washer provided.

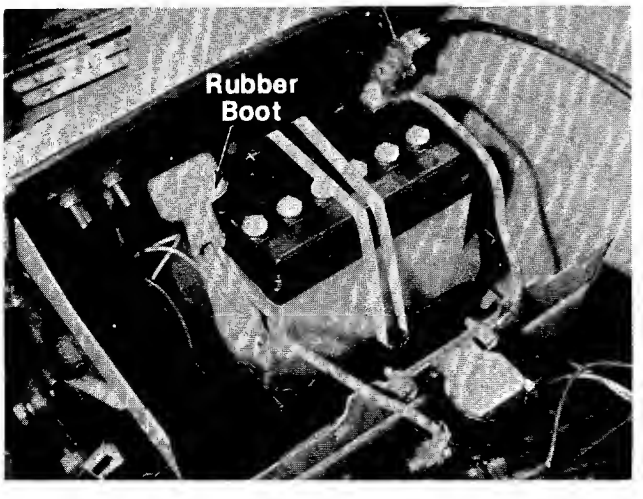
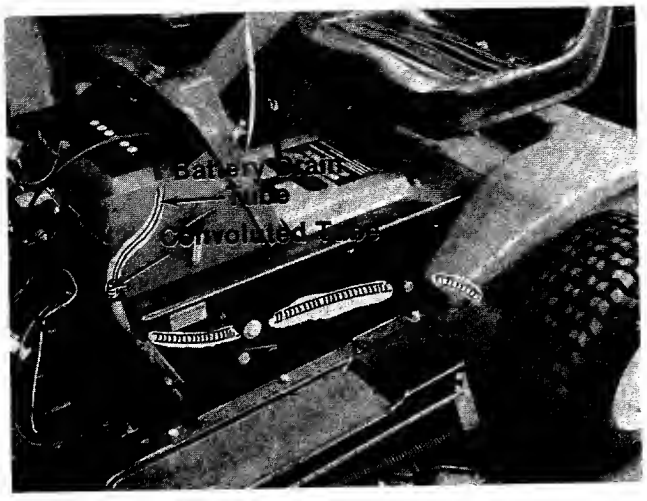


FIGURE 12.

16. Slide the rubber boot over the positive terminal. See figure 12.



17. Feed the end of the battery drain tube into the convoluted tube already installed in tractor. See figure 13.

FIGURE 13.

CONTROLS

a. **Throttle Control.** The throttle control is used to regulate the engine speed and choke the engine. The engine should be operated from ¾ to full throttle when operating the cutting deck or snow thrower (optional). See figure 14.

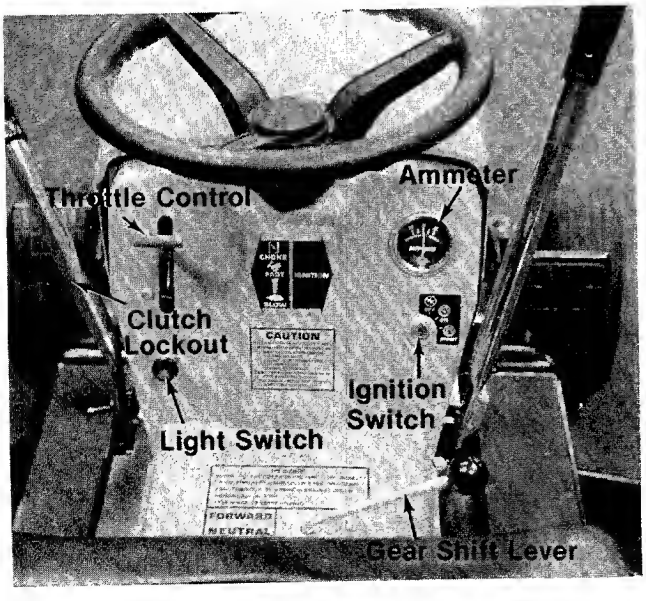


FIGURE 14.

b. **Gear Shift Lever.** The gear shift lever is used to shift into "FORWARD," "NEUTRAL" or "REVERSE." See figure 14.

c. **Brake.** The brake pedal is located on the right hand side of the mower and is operated by depressing it with your right foot. See figure 15.

d. **Brake Lock.** The brake lock is located on the right hand side of the mower. To lock the brake, depress the brake pedal and lift up the lock button. The pedal will stay depressed. To release, depress the pedal. See figure 15.

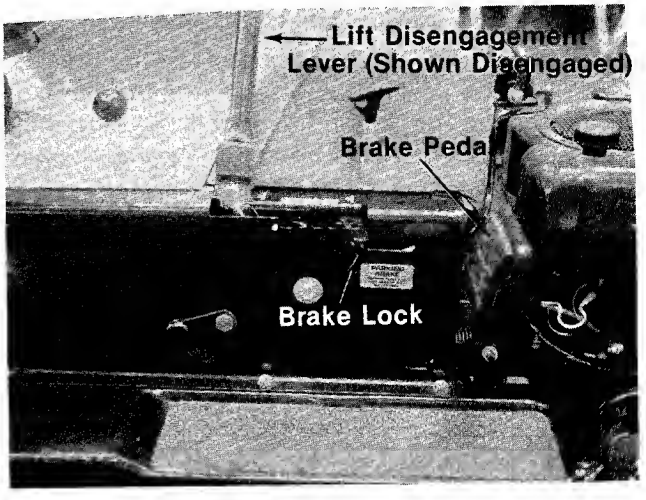


FIGURE 15.

e. **Clutch Pedal.** The clutch pedal is used to disengage the drive mechanism. Depressing the clutch pedal at any time will reduce mower speed. If depressed all the way, it will stop the mower. See figure 16.

f. **Clutch Lockout.** When the clutch pedal is depressed all the way it can be locked by placing the clutch lockout in the "START" position as shown in figure 16. The clutch lockout must be in this position before the engine will start.

g. **Stop Lever.** The stop lever allows you to regulate the maximum ground speed of the riding mower by setting the stop lever in any one of the five settings. The farther forward the stop lever is set, the faster the ground speed. See figure 16.

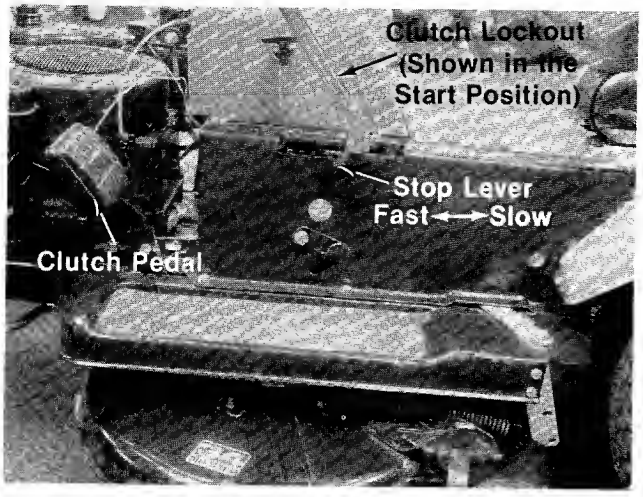


FIGURE 16.

h. **Ammeter.** The ammeter registers the rate of battery charge or discharge. The ammeter should register on the plus side (+) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 14.

i. **Light Switch.** Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 14.

j. **Ignition Switch.** The ignition switch is located on the right side of the dashboard.

Turn the key to the "START" position to start the engine. When the engine is running, let the key return to the "ON" position. To stop the engine, turn the key to the left to the "OFF" position and remove it to prevent accidental starting. See figure 14.

NOTE

The engine will not start unless the clutch lockout is in the "START" position and the lift lever is in the DISENGAGED position.

k. **Lift and Disengagement Lever.** It is used to raise the cutting deck. Pulling it all the way back and locking it disengages the blades. The engine will not start unless the lift and disengagement lever is in the disengaged position. See figure 15.

i. **Cutting Controls.** The cutting controls consist of the height of cut stop and the wheel height adjusters.

Height of Cut Stop. See figure 17. Lift the stop and set it at the desired cutting height.

FIGURE 17.

Wheel Height Adjuster. See figure 18. Move the lever towards the wheel and set it in the desired cutting height.

The cutting height of the mower can be set in two different ways: FULL FLOAT position where the deck follows the contour of the ground, and the SUSPENDED position where the deck hangs from the frame of the rider. The suspended position is normally used for cutting rough uneven ground.

To set the cutting deck in the full float position, set the wheel height adjusters in the desired cutting height as indicated in figure 18. Set height of cut stop all the way forward.

To set the cutting deck in the suspended position, set the height of cut stop in the desired cutting height and then set the deck wheels so they just clear the ground.

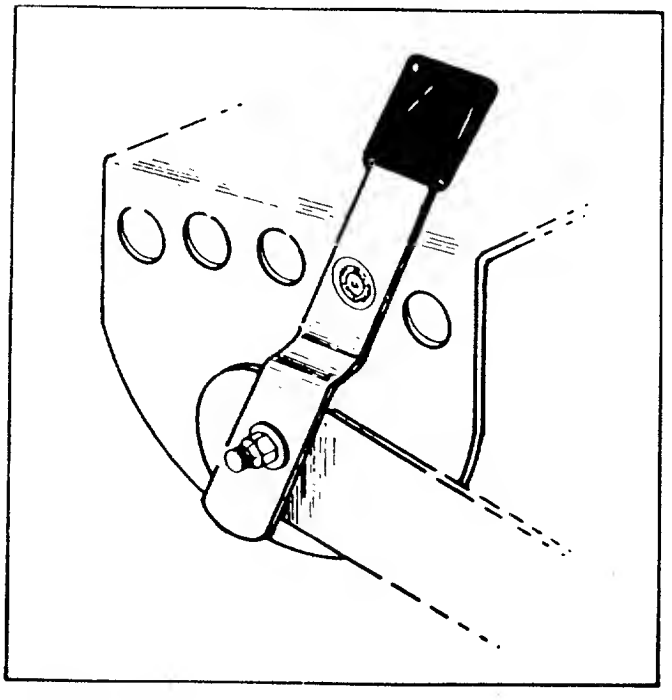


FIGURE 18.

OPERATION

CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
   a. Shift transmission to neutral
   b. Set parking brake
   c. Disengage attachment clutch
   d. Shut off engine
   e. Remove ignition key
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.
5. Look to the rear before backing up.

TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Pressure should be approximately 15 p.s.i. Equal tire pressure should be maintained on all tires. Maximum tire pressure is 30 p.s.i.

STARTING THE ENGINE

1. **Service the engine with oil and gasoline as described in the engine manual.**
2. Open the fuel shut-off valve. See figure 19.

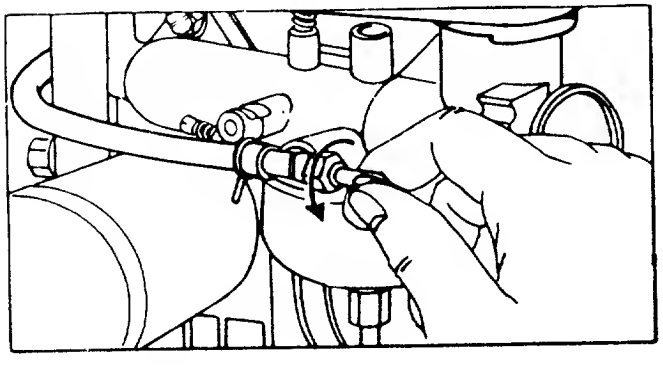


FIGURE 19.

3. Place the clutch lockout in the "START" position. See figure 16.
4. Place the lift and disengagement lever in the "DISENGAGED" position. See figure 15.

NOTE

This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch pedal is in lockout position and the lift and disengagement lever is in the disengaged position.

WARNING

Do not operate the rider if the interlock system is malfunctioning because it is a safety device, designed for protection.

5. Set the throttle control in the "CHOKE" position. See figure 14.
6. Turn the ignition key to the "START" position. When the engine is running, let the key return to the "ON" position. See figures 14 and 20.

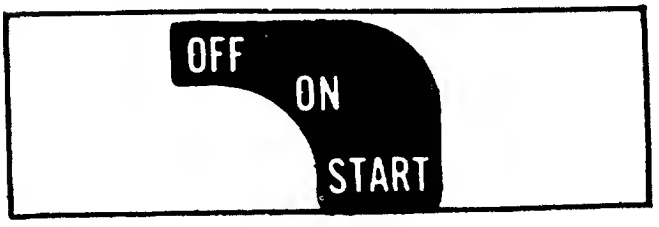


FIGURE 20.

STOPPING THE ENGINE

Turn the ignition key to the left to the "OFF" position. Remove the key to prevent accidental starting.

NOTE

A brief break-in period is essential to ensure maximum engine and mower life. This consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 2 hours of operation.

IMPORTANT

If you strike a foreign object, stop the engine (motor). Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

OPERATING THE MOWER

1. Set the desired cutting height.
2. Start the engine.
3. Release parking brake.

CAUTION

Parking brake MUST be disengaged before unit is put into motion.

4. Move throttle control to desired engine speed.
5. Set the stop lever in the slowest position (first notch). See figure 16.

NOTE

After you become familiar with the operation of the mower, you can move the stop lever to a faster position.

6. While holding down the clutch pedal, move the clutch lockout lever forward.
7. Put the gear shift lever into either "FORWARD" or "REVERSE."

NOTE

DO NOT force the gear shift lever! If the lever cannot be moved from "NEUTRAL" to one of the drive positions, release the clutch pedal slowly, depress it again, and then move the gear shift lever as required.

8. Slowly release the clutch pedal.
9. To stop, depress the clutch and brake pedals.

NOTE

Unit is equipped with separate brake and clutch pedals. It is necessary to disengage clutch when applying brakes to stop.

CAUTION

Gear changing should be done only after the mower had been brought to full stop. If the mower is not to be used for a long period, place the gear shift lever in "NEUTRAL" and stop the engine. DO NOT leave the machine on an incline.

OPERATING THE CUTTING BLADES

The cutting blades may be engaged while the mower is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.

WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening and from the blades.

To stop the blades, move the lift and disengagement lever (figure 15) into the DISENGAGED position. This raises the deck and disengages the blades.

NOTE

When the machine is used for other than mowing operations, the blade drive should be disengaged.

GRASS CATCHER Model 015 is available as optional equipment for the lawn tractors shown in this manual.

WARNING

The mower should not be operated without the entire grass catcher or chute deflector in place.

NOTE

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0121.

ADJUSTMENTS

WARNING

Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

CHAIN ADJUSTMENT

To tighten the chain, loosen two lock nuts on each side of rear axle as shown in figure 26.

Tighten the adjusting nuts (see figure 21) equally on both sides. Tighten until the chain has ½ inch slack between the sprockets.

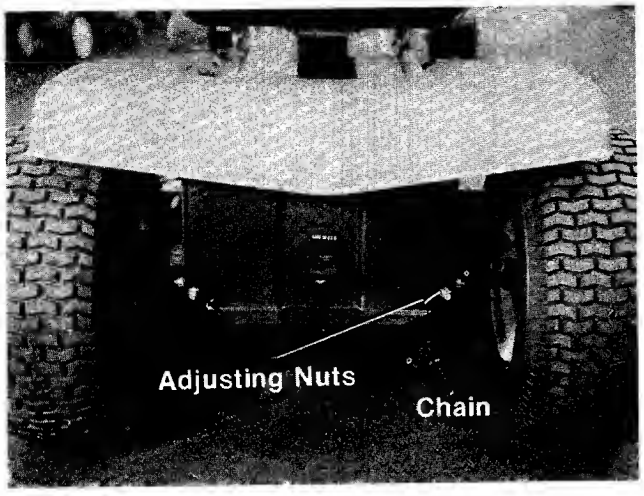


FIGURE 21.

The adjusting nuts can be tightened individually to align the axle.

Tighten the 4 lock nuts after the adjustment is made.

BRAKE ADJUSTMENT

During normal operation of this machine, the brakes are subject to wear and will require periodic examination and adjustment.

The brake is located beside the differential. To test the brake, proceed as follows.

1. Depress the brake pedal and lift the brake lock so the pedal remains depressed. See figure 15.
2. Place the clutch lockout in the "START" position. See figure 16.
3. Try to push the rider. If the rider can be moved, adjust the brake as follows:
   A. Loosen the nut on the disc brake. See figure 22.
   B. Turn the adjusting pin clockwise until it stops.
   C. Back off the adjusting pin one complete turn.
   D. Tighten the nut.
4. Test the brake. Repeat if necessary.

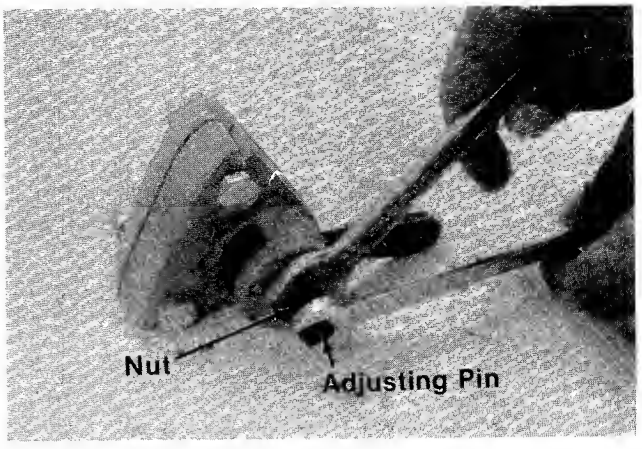


FIGURE 22.

WHEEL ADJUSTMENT (See Figures 23 and 24)

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in follow these steps.

1. Remove the elastic lock nut and drop the tie rod end from the wheel bracket.
2. Loosen the hex jam nut on tie rod.
3. Adjust the tie rod assembly for correct toe-in.

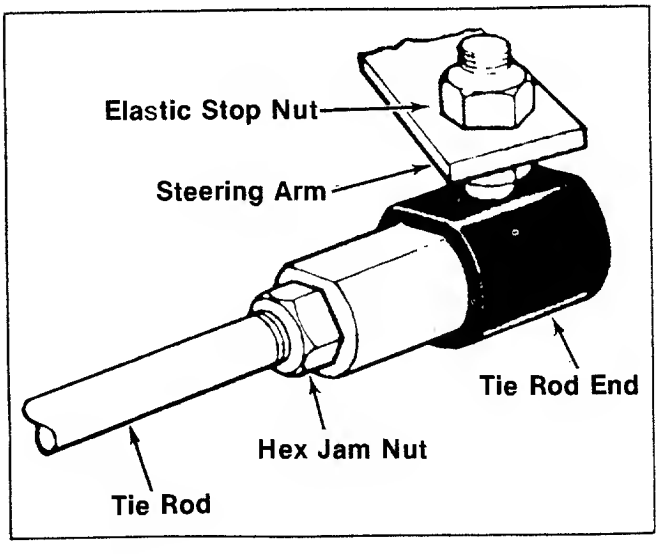


FIGURE 23.

Dimension "B" should be approximately 1/8" less than Dimension "A".

A.) To increase Dimension "B", screw tie rod into tie rod end.

B.) To decrease Dimension "B", unscrew tie rod from tie rod end.

C.) Reassemble tie rod. Check dimensions. Readjust if necessary.

NOTE

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

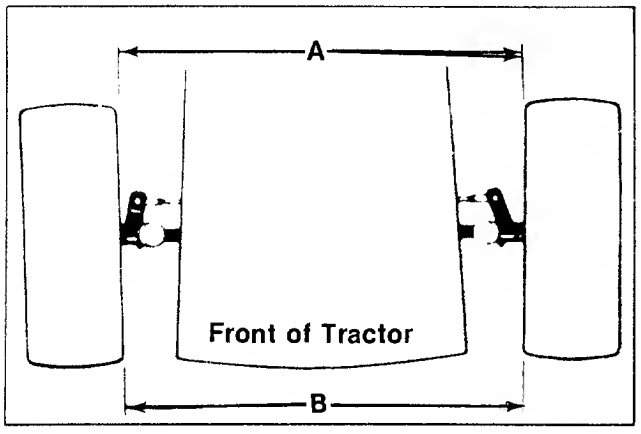


FIGURE 24.

CARBURETOR ADJUSTMENT

WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Never make unnecessary adjustments. The factory recommended settings are correct for most applications.

If adjustments are needed, refer to the engine manual packed with the lawn tractor.

LUBRICATION

Bearings—Lubricate the wheel bearings (2 per wheel) and the upper and lower spindle bearings with SAE 30 oil once a season. See figure 25.

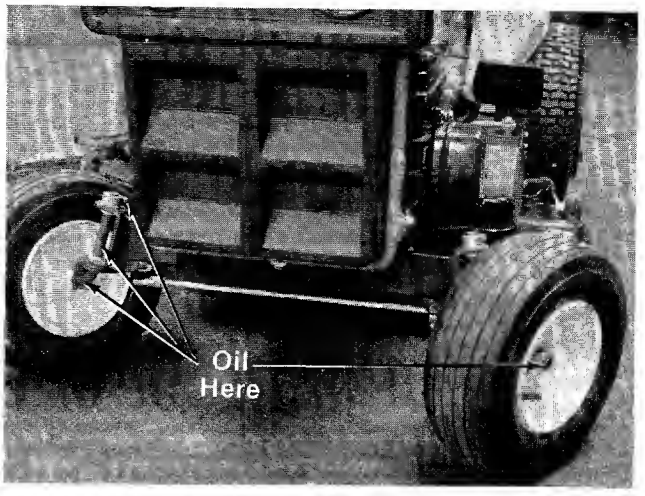


FIGURE 25.

Lubricate the four rear axle bearings with SAE 30 oil once a season. See figure 26.

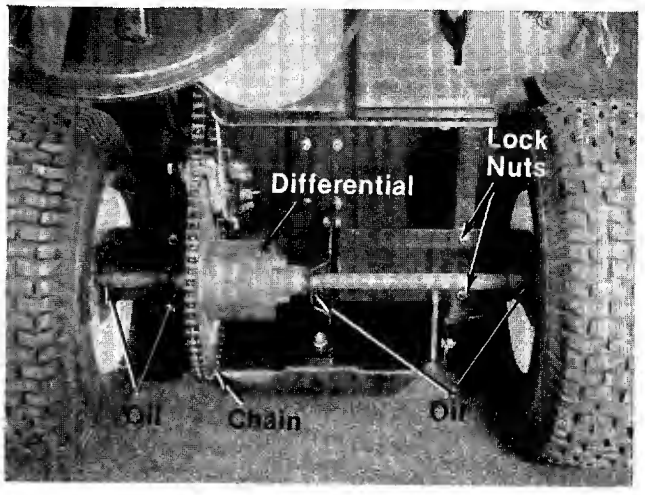


FIGURE 26.

Variable Speed—Lubricate with dry-slide or oil at least once a season. Refer to pages 26 and 28.

Front Pivot Bar—Lubricate at least once a season with light oil.

Steering and Drag Link—Lubricate once a season with light oil.

Chain—The chain can be lubricated by wiping it with an oily rag.

Differential and Transmission—The differential and transmission are sealed at the factory and require no further lubrication unless disassembled for repair.

MAINTENANCE

CUTTING BLADE

A. Removal for Sharpening or Replacement

WARNING

Be sure to disconnect and ground the spark plug wire before working on the cutting blade to prevent accidental engine starting.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle.
2. Remove the blade and adapter from the spindle. Be careful not to lose the key on the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

NOTE

It is recommended that the blade always be removed from the adapter for the best test of balance.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the engine spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. Make certain key is in place on the blade spindle.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.
5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

MOWING DECK

The underside of the mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next mowing.

The deck may be cleaned by washing with a stream of water from a garden hose. Be sure to disconnect the spark plug wire and ground it while performing this maintenance.

CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil should be kept between the add and full marks on the dipstick.

After the first five hours of operating a new engine, drain the oil (see figure 27) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. This procedure ensures minimum wear of engine parts. To change the oil, proceed as follows:

1. With the machine on level ground, place a suitable metal container under the oil drain plug, then remove the drain plug. See figure 27.

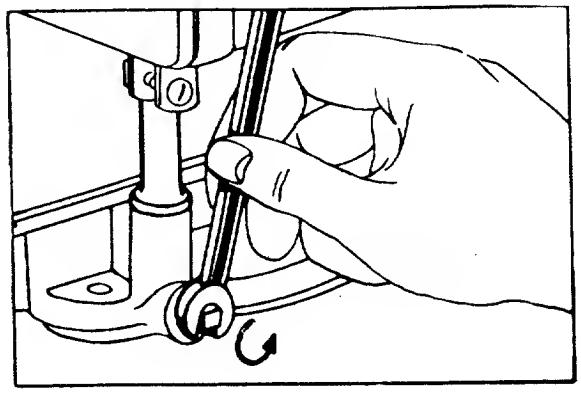


FIGURE 27.

2. After the oil has been drained completely from the crankcase, replace the drain plug and tighten.
3. Refill crankcase with quantity and type of oil as specified in the engine manual.

AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation.

To service the air cleaner, refer to the engine manual packed with your unit.

BELTS

Be certain that belts are free of oil or dirt. Wipe the belts periodically with a clean rag.

NOTE

Belt tension is automatically maintained by the spring on the variable speed bracket on the drive belts and the belt tension on the deck belt is maintained by the two deck springs.

SPARK PLUG

The spark plug should be cleaned and the gap reset every 25 hours of engine operation. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specifications.

INSTALLATION OF TIRE TO RIM

WARNING

The following procedure must be followed when removing or installing a tire to the rim.

1. Lubricate the tire beads and rim flanges.
2. Do not exceed 30 psi when seating beads.
3. Adjust to recommended pressure after beads are sealed.

BATTERY REMOVAL OR INSTALLATION

WARNING

When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.

WARNING

Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or good quality drinking water. NEVER add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

COMMON CAUSES FOR BATTERY FAILURE ARE:

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose hold downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte

NOTE

THESE FAILURES DO NOT CONSTITUTE WARRANTY.

BELT REMOVAL AND REPLACEMENT

Preparation

1. To prevent gasoline from leaking from the engine, remove the fuel tank cap, place a piece of thin plastic over the neck of the fuel tank and screw on the cap.
2. Disconnect the spark plug wire and ground it against the engine.
3. Remove the battery to prevent acid from leaking.

WARNING

Disconnect the negative terminal first and connect last when installing the battery.

To Remove the Mowing Unit Belt:

1. Place the shift lever in the neutral position. See figure 14.
2. Remove the belt keeper and large bolt on the engine pulley. See figure 28.

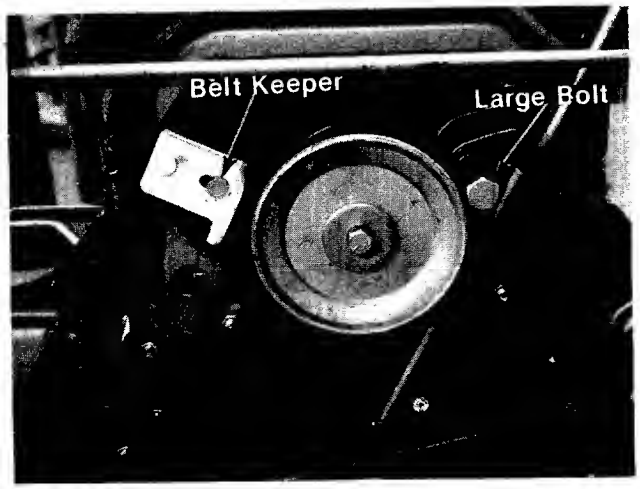


FIGURE 28.

3. Unhook the belt from the engine pulley. See figure 29.

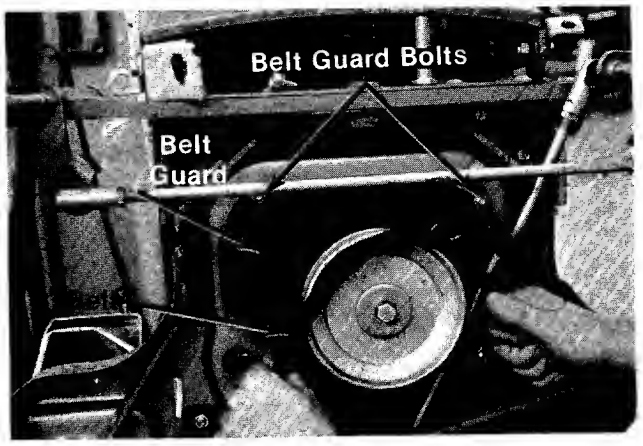


FIGURE 29.

4. Place the lift lever in the engaged position. See figure 15.
5. Unhook the tension springs on both sides of the deck. See figure 30.

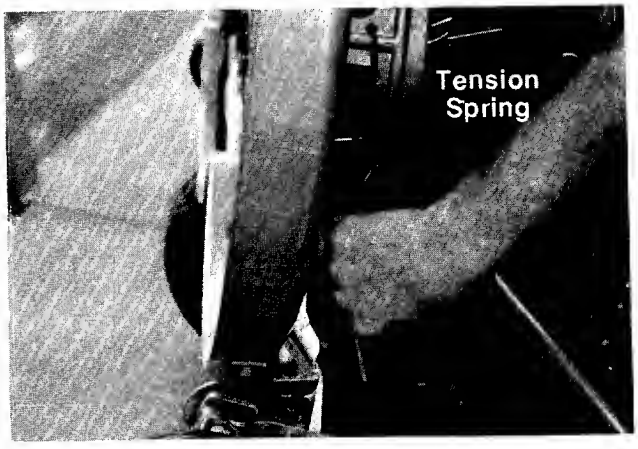


FIGURE 30.

6. Remove the front four deck links from the cutting deck. See figure 31.
7. Remove the belt guards from both deck pulleys. See figure 31.
8. Remove and replace the belt. Reassemble in reverse order.

To Remove the Transmission belts:

1. Place the lift lever in the disengaged position. See figure 15.
2. Remove the belt keeper and large bolt on engine pulley. See figure 28.
3. Unhook the belt from the engine pulley. See figure 29.

4. Place the lift lever in the engaged position. See figure 15.
5. Unhook the tension springs on both sides of the deck. See figure 30.
6. Remove the front four deck links from the cutting deck. See figure 31.
7. Tip the deck down as shown in figure 31.

NOTE

Leave the belt attached to the deck pulleys unless you want to replace it.

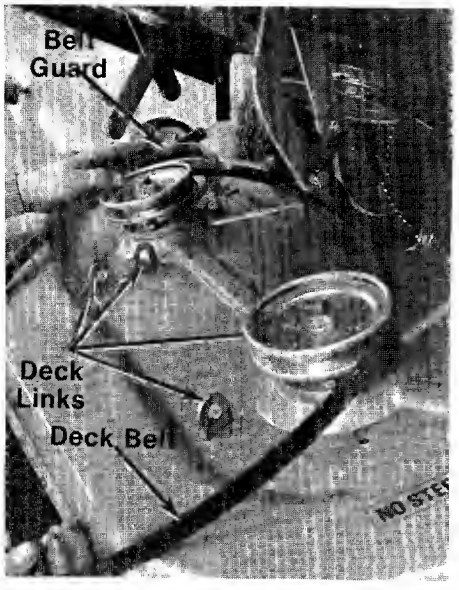


FIGURE 31.

8. Remove the engine belt guard by removing the two front engine mounting bolts. See figure 32.

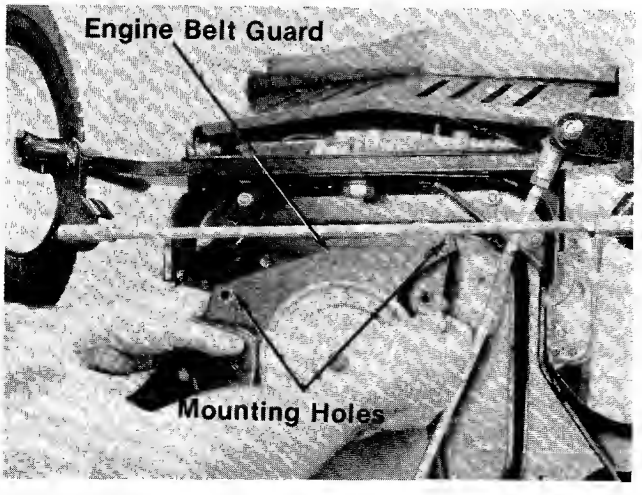


FIGURE 32.

9. Place the clutch lockout in the "START" position. See figure 16.
10. While pushing the variable speed pulley towards the center of the rider, remove the lower belt from the transmission pulley. See figure 33.

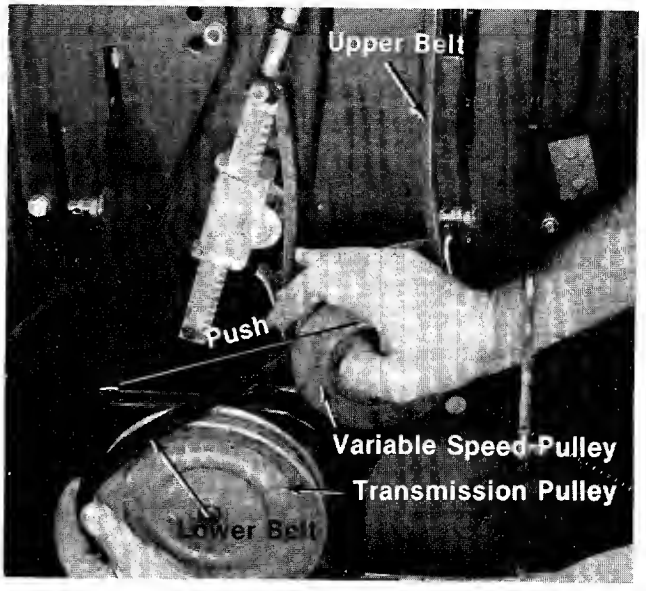


FIGURE 33.

11. Slide the movable center section of the variable speed pulley away from the rider and remove the upper belt from the variable speed pulley. See figure 34.

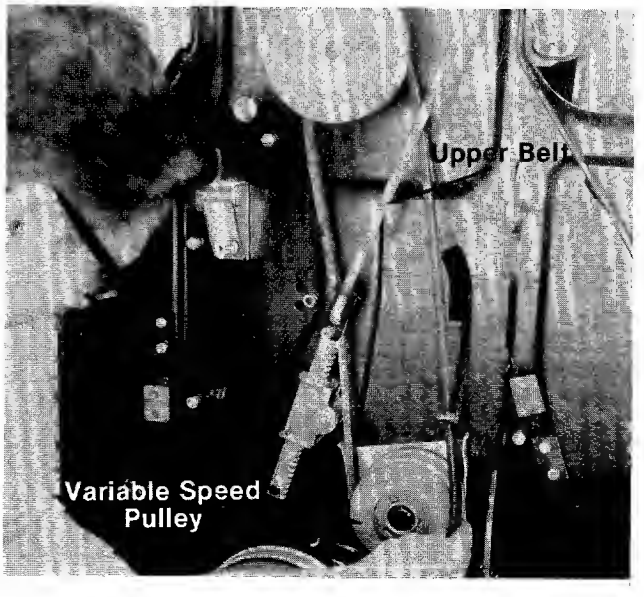


FIGURE 34.

12. Unhook the upper belt from the engine pulley and remove. See figure 35.
13. Reassemble in reverse order with new belts.

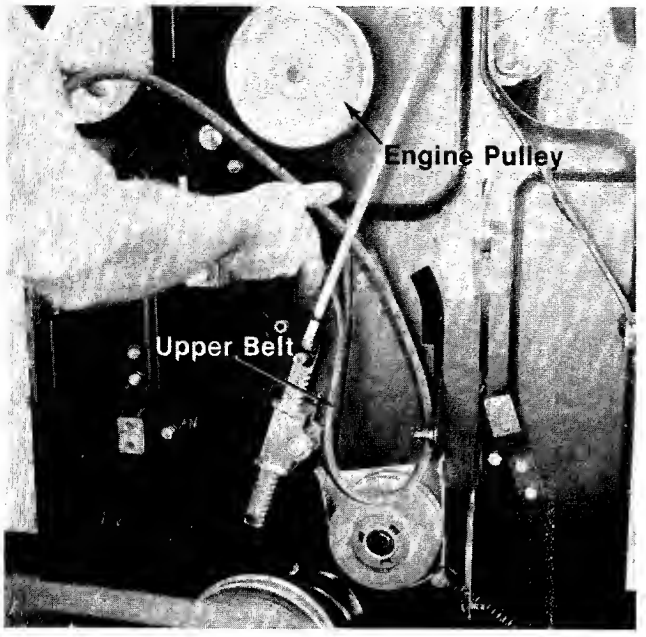


FIGURE 35.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, the following precautions are recommended:

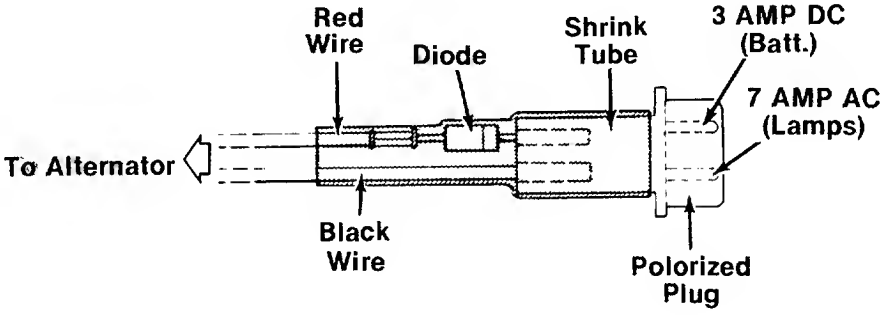
1. Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank, then run the engine until all fuel in carburetor is exhausted.

WARNING

Do not drain fuel while smoking, or if near an open fire.

2. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill the crankcase with clean new oil.
3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about six drops of engine oil into the cylinder, and then pull the recoil starter several times to spread the oil on the cylinder wall. Replace the spark plug, but DO NOT connect the wire.
4. Clean the engine and the entire mower thoroughly.
5. Lubricate all lubrication points indicated in figures 25 and 26. Then wipe the entire machine with an oiled rag in order to protect the surfaces.

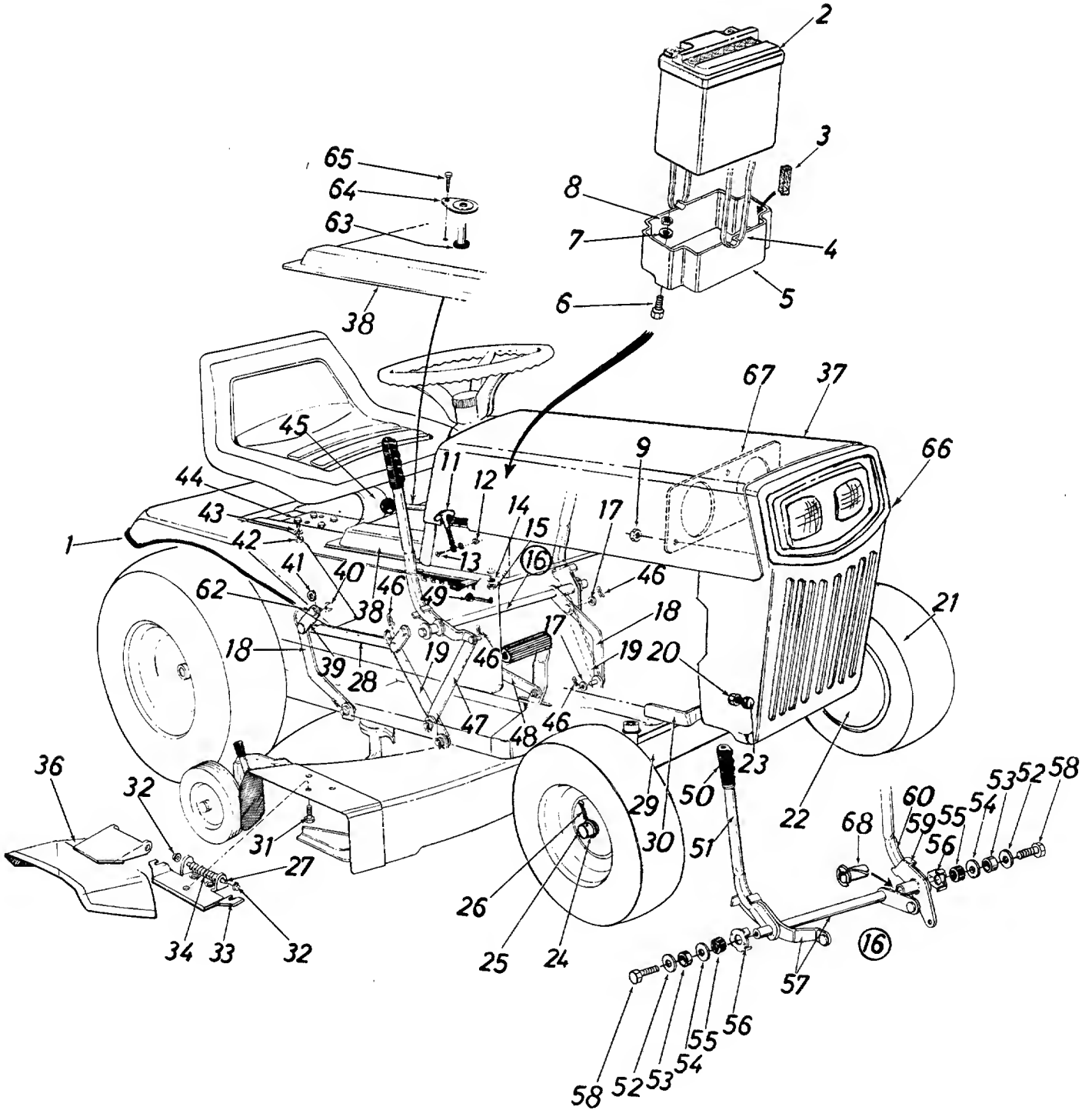
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative, identified at the terminal post by (Neg, N or -), grounded. The positive (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blow fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrican's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working, either engine alternator or trickle charger. **Trickle Charger.** Check with multimeter. Charger 725-0578—input 120 V A.C., no load output 13.5 V D.C., rated load current 1 amp. Charger 725-0507—input 120 V A.C., no load output 17.4 V D.C., rated load current 1/2 amp. **Alternator** (dual or single circuit) The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.  The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not,the alternator (stator) or lead wire is bad and should be replaced.
	Mechanical failure. (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. **If the engine does not crank:** (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke (if separate control) f starting.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line plugged. Remove and clean.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	**Stop engine immediately.** Check all pulleys, blade spindles, blade adpaters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	**Stop engine immediately.** Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission gear. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

Models 465 and 466



Models 465 and 466

PARTS LIST FOR MODELS 465 AND 466 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0511		Trim Strip 78" Lg.	
2	725-0514		12V-Battery	
3	722-0135		PVC Foam 1" x 2" x ½"	
4	735-0204		Battery Strap	
5	731-0534		Battery Box	
6	710-0377		Hex Sems Bolt ¼-20 x .62" Lg.	
7	736-0142		Flat Wash.	
8	712-0287		Hex Nut ¼-20 Thd.*	
9	712-0121		Hex Nut 10-24 Thd.*	
11	723-0296		Hood Lock Ass'y.	
12	712-0287		Hex Nut ¼-20 Thd.*	
13	710-0289		Hex Bolt ¼-20 x .50" Lg.*	
14	736-0119		Spring L-Wash. 5/16" Scr.*	
15	712-0267		Hex Nut 5/16-18 Thd.*	
16	—		See Breakdown	
17	736-0192		Fl-Wash. .531 I.D. x .93 O.D.	
18	10349		Deck Link Ass'y.	
19	13636		Deck Link Ass'y.	
20	712-0923		Hex Cent. L-Nut 5/8-18 Thd.	
21	734-0999		Front Wheel Ass'y.—Comp. 13.0 x 5.0	
	734-0495		Front Wheel Tire Only	
22	734-0986		Front Wheel Rim Ass'y. Only	
23	710-0622		Hex Bolt 5/8-18 x 1.62" Lg.	
24	736-0285		Fl-Wash. .63 I.D. x 1.62 O.D.	
25	741-0313		Front Wheel Bearing	
26	714-0470		Cotter Pin 1/8" Dia. x 1.25" Lg.*	
27	711-0571		Pivot Pin	
28	09735		Connecting Rod 3/16 x 1.00 x 12.5" Lg.	
29	14198	—452	Pivot Bar Ass'y.	
30	12411		Front Pivot Brkt.	
31	710-0195		Hex Bolt ¼-28 x .62" Lg.*	
32	726-0106		Push-On Flange Palnut	
33	11399		Adapter Plate Ass'y.	
34	732-0261		Torsion Spring	
36	11633		Chute Cover Ass'y. Comp.	
37	11855	—486	Front Hood	
38	11840	—486	Upper Frame Cover	
39	09721		Pivot Link Ass'y.	
40	712-0267		Hex Nut 5/16-18 Thd.*	
41	736-0264		Fl-Wash. .344 I.D. x .62 O.D.	
42	712-0267		Hex Nut 5/16-18 Thd.*	
43	736-0119		Spring L-Wash. 5/16" Scr.*	
44	710-0198		Hex Hd. Sems Scr. 5/16-18 x .75" Lg.*	
45	732-0354		Seat Spring	
46	714-0101		Internal Cotter Pin ½" Dia.	
47	10904		Lockout Link Ass'y.	
48	13875		Parking Brake—Lever Ass'y.—R.H.	
49	726-0121		Push Cap ¼" Dia.—Black	
50	710-0157		Grip	
51	749-0212		Lift Handle R.H.	
52	736-0119		L-Wash. 5/16" I.D.*	
53	748-0273		Spacer .632" I.D. x .88" O.D.	
54	736-0237		Fl-Wash. .656" I.D. x 1.25" O.D.	
55	735-0195		Rubber Wash.	
56	11029		Handle Pivot Brkt.	
57	13630		Lift Handle Brkt. Ass'y.	
58	710-0623		Self-Tap Scr. 3/8-16 x .75" Lg.	
59	11034		Clutch Handle Brkt. Ass'y.	
60	11031		Lift Handle L.H.	
62	738-0140		Shld. Bolt .473 x .180	
63	731-0309		Nylon Bushing	
64	12653		Bushing Cap	
65	710-0351		Truss Mach. Scr. #10 x .50" Lg.	
66	10793	—486	Grille	
67	10795		Head Lamp Retainer	
68	741-0257		Flanged Nyliner	

(486—Star Orange)

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Star Orange Finish—11855 (486).)

WHEEL CHART

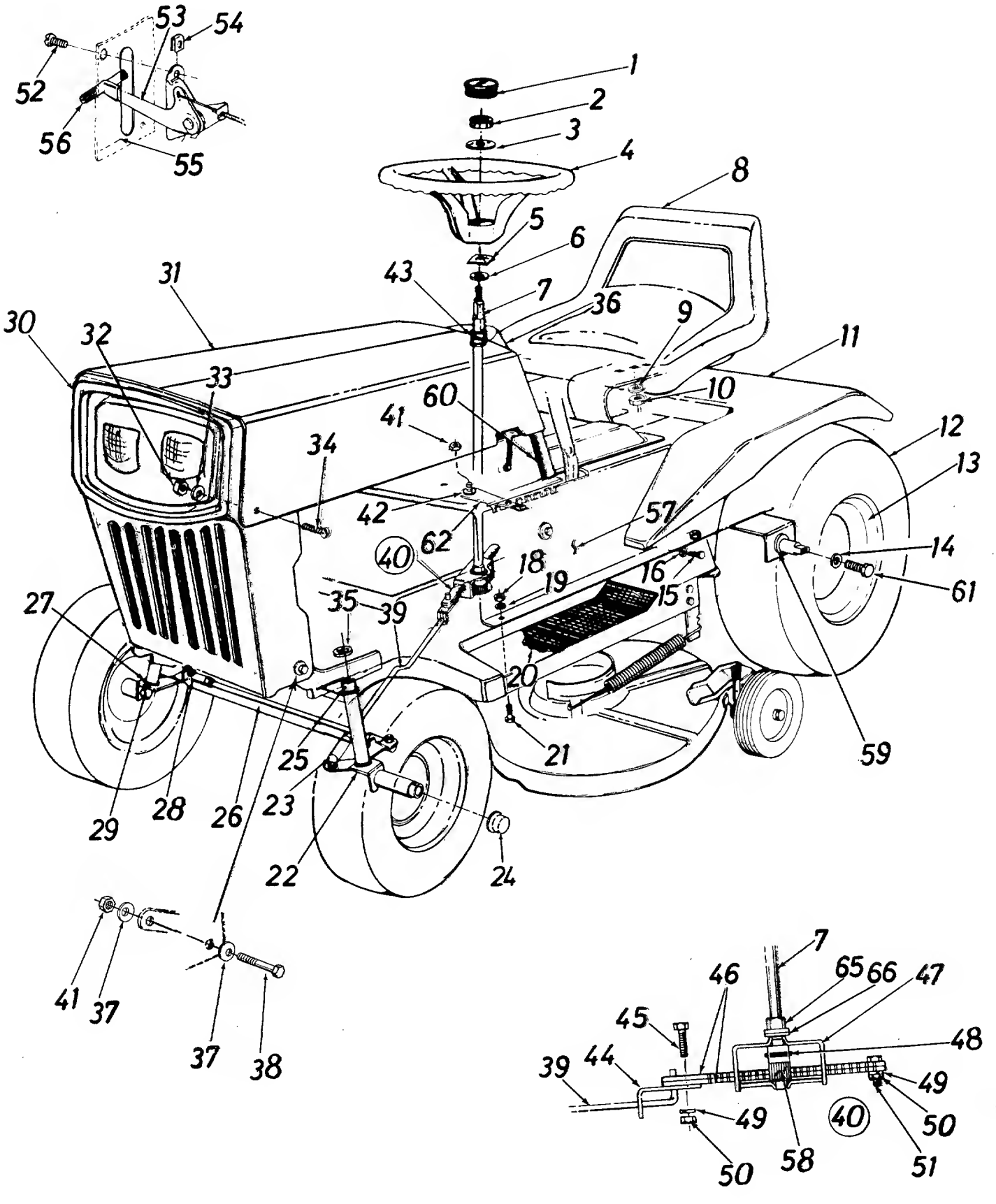
FRONT WHEEL

PART NO.	DESCRIPTION	NEW PART
734-0999	Wheel Ass'y. Complete	
734-0986	Rim Only with Hub	
734-0495	Tire Tubeless 13 x 5.00	
734-0255	Air Valve	
741-0313	Bearing	
734-0249	Inner Tube (Service Only)	

REAR WHEEL

PART NO.	DESCRIPTION	NEW PART
734-0592	Wheel Ass'y. Complete	
734-0594	Rim Only	
734-0294	Tire Tubeless 18 x 6.50-8	
734-0255	Air Valve	
741-0199	Bearing	
734-0310	Inner Tube (Service Only)	

Models 465 and 466



Models 465 and 466

PARTS LIST FOR MODELS 465 AND 466 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap	
2	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
3	736-0219		Bell-Wash. .400 I.D. x 1.13 O.D.	
4	731-0219		12.0 Inch Steering Wheel	
5	712-0222		Push Nut 5/8" Dia.	
6	736-0174		Wave Wash. .660 I.D. x .88 O.D.	
7	738-0200		Steering Shaft	
8	757-0264		Seat Ass'y. Comp.	
9	736-0921		Spring L-Wash. ½" Scr.*	
10	712-0206		Hex Nut ½-13 Thd.*	
11	09087	—486	Rear Fender	
12	734-0592		Rear Wheel Ass'y. Comp. 18.0 x 6.50-8	
	734-0294		Rear Wheel Tire Only 18.0 x 6.50-8	
	734-0255		Air Valve—Tubeless	
13	734-0594		Rear Wheel Rim Ass'y.	
14	736-0242		Bell-Wash.	
15	710-0258		Hex Scr. ¼-20 x .62" Lg.*	
16	736-0329		Spring L-Wash. ¼" Scr.*	
18	712-0267		Hex Nut 5/16-18 Thd.*	
19	736-0119		Spring L-Wash. 5/16" Scr.*	
20	723-0241		Foot Pad 15.75" Lg. x 4.0" Wide	
21	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
22	14457		Front Axle Ass'y. L.H.	
23	723-0156		Ball Joint Ass'y.	
24	731-0484		Hub Cap (Front)	
25	714-0470		Cotter Pin 1/8" Dia. x 1.25" Lg.*	
26	711-0613		Tie Rod	
27	741-0313		Flange Brg. .630 I.D.	
28	723-0156		Ball Joint Ass'y.	
29	14456		Front Axle Ass'y. R.H.	
30	10793	—486	Grille—Front	
31	11855	—486	Front Hood	
32	712-0287		Hex Nut ¼-20 Thd.*	
33	736-0329		Spring L-Wash. ¼" Scr.*	
34	710-0286		Truss Mach. Scr. ¼-20 x .50" Lg.*	
35	726-0159		Push Nut	
36	14450	—486	Dash Panel Ass'y.	
37	736-0105		Bell-Wash.	
38	710-0253		Hex Bolt 3/8-16 x 1.00" Lg.*	
39	747-0138		Steering Rod	
40	717-0294		Steering Ass'y. Breakdown	
41	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
42	735-0126		Rubber Wash.	
43	741-0225		Hex Flange Brg. .62" I.D. Bronze	
44	12372		Steering Rod Brkt.	
45	710-0412		Hex Scr. ¼-28 x .75" Lg.*	
46	11048		Steering Segment	
47	11074		Steering Housing Ass'y.	
48	715-0134		Spring Pin Spiral 3/16" Dia. x 1.50" Lg.	
49	736-0329		Spring L-Wash. ¼" Scr.*	
50	712-0117		Hex Nut ¼-28 Thd. Lock*	
51	710-0412		Hex Scr. ¼-28 x .75" Lg.*	
52	710-0227		Hex AB Tap Scr. #8 x .50" Lg. (465)	
	710-0351		Truss Mach. Scr. 10Z x .50" Lg. (466)	
53	746-0357		Throttle Control—Comp. (465)	
	746-0235		Throttle Control—Comp. (466)	
54	712-0147		Speed Nut #10-24 U-Type (466)	
55	14450		Dash Panel Ass'y.	
56	722-0111		Knob Only—Throttle Control	
57	13474		Upper Frame	
58	748-0203		12 Teeth Spur Gear	
59	736-0134		Fl-Wash.	
60	731-0516		Vinyl Blk. Strip for Dash 12.0' Lg.	
61	710-0627		Hex Scr. w/Lock 5/16"-14 x .75" Lg.	
62	11027		Handle Stop Brkt.	
65	741-0226		Hex Flange Bearing .50 I.D.	
66	736-0192		Flat Washer .531 I.D. x .93 O.D.	

(486—Star Orange)

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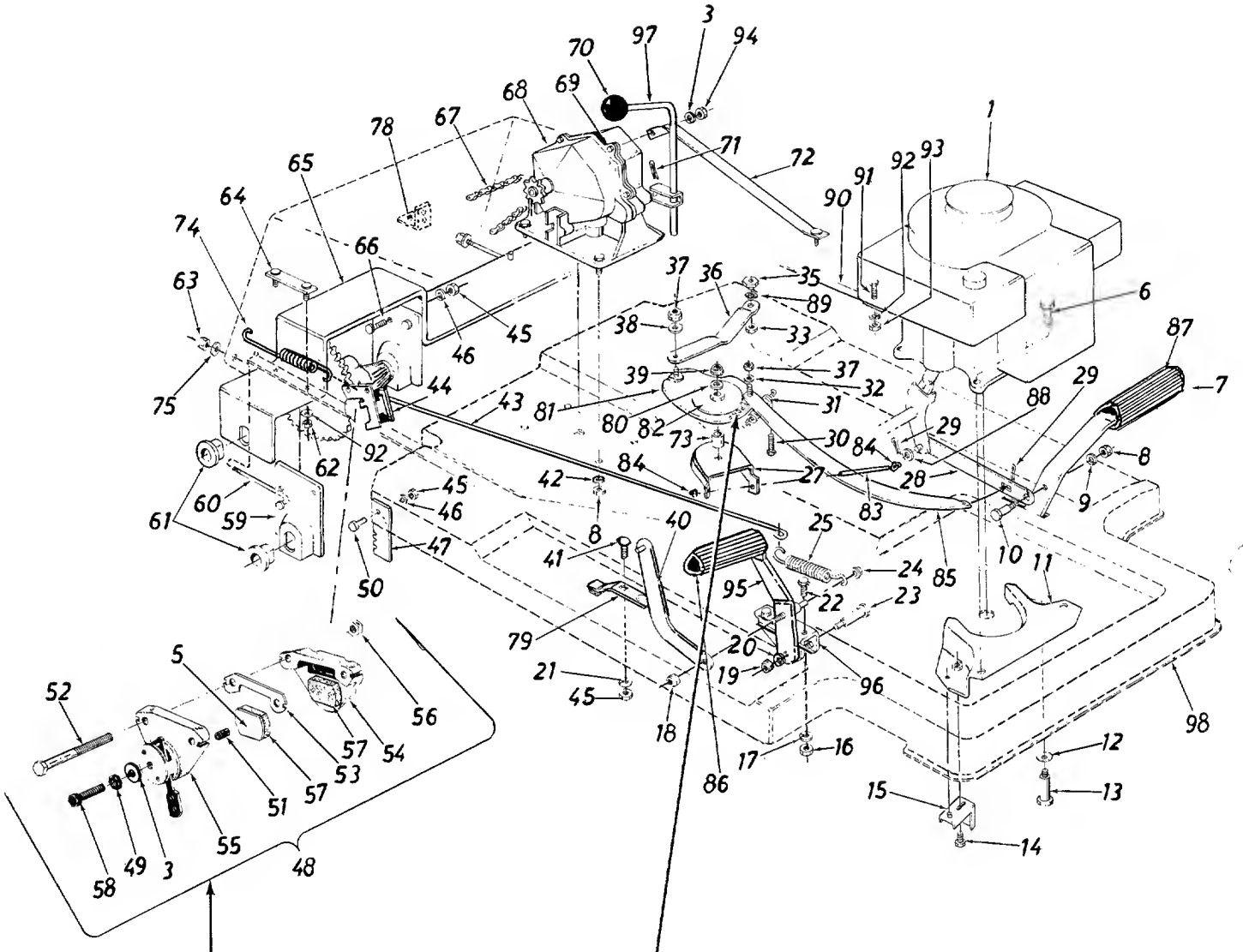
When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Star Orange Finish—13322 (486).)

NOTE

This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

NOTE: The engine is not under warranty by the lawn mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."

Models 465 and 466



NOTE: If for any reason disc brake is disassembled, be sure round end of push pin (Ref. No. 51) is toward the cam lever (Ref. No. 55).

NOTE: Lubricate with dry-slide or oil between the variable speed eccenter assembly (Ref. No. 81) and the variable speed plate (Ref. No. 82) at least once a season.

Models 465 and 466

PARTS LIST FOR MODELS 465 AND 466 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	—		Engine	
3	HU-20-9764		Washer	
5	HU-25-13808		Backing Plate	
6	710-0442		Hex Bolt 5/16-18 x 1.50" Lg.*	
7	14220		Clutch Pedal Ass'y.	
8	712-0267		Hex Nut 5/16-18 Thd.*	
9	736-0119		L-Wash. 5/16" Scr.*	
10	738-0140		Shld. Scr. .437 Dia. x .180	
11	12654		Engine Belt Guard Ass'y.	
12	736-0105		Bell-Wash. 3/8" Scr.	
13	738-0215		Shld. Scr. .498" Dia. x 3.00" Lg.*	
14	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
15	12160		Belt Keeper Ass'y.	
16	712-0267		Hex Nut 5/16-18 Thd.*	
17	736-0119		L-Wash. 5/16" Scr.*	
18	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
19	712-0266		Hex Cent. L-Nut 3/8-16 Thd.*	
20	736-0169		L-Wash. 3/8" Scr.*	
21	736-0329		L-Wash. ¼" Scr.*	
22	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*	
23	738-0373		Shld. Scr. .496" Dia. x .525" Lg.	
24	726-0100		Push Nut 3/8" Rod	
25	732-0245		Brake Spring	
27	11066		Vari. Spd.—Belt Guard Ass'y.	
28	12700		Clutch Connecting Brkt. Ass'y.	
29	714-0507		Cotter Pin 3/32 Dia. x .75" Lg.*	
30	710-0376		Hex Scr. 5/16-18 x 1.00" Lg.*	
31	732-0208		Variable Drive Spring	
32	736-0264		Fl-Wash. .344 I.D. x .62 O.D. x .063	
33	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
35	711-0404		Shld. Nut	
36	12711		Variable Speed—Link	
37	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
38	736-0264		Fl-Wash. .344 I.D. x .62 O.D.	
39	712-0922		Hex Jam Nut ½-20 Thd.	
40	13875		Park. Brake—Lever Ass'y. R.H.	
41	710-0134		Carriage Bolt ¼-20 x .62" Lg.*	
42	736-0119		L-Wash. 5/16" Scr.*	
43	747-0277		Brake Rod .25" Dia. x 23.50" Lg.	
44	13459		Disc Brake Brkt. Ass'y.	
45	712-0287		Hex Nut ¼-20 Thd.*	
46	736-0329		L-Wash. ¼" Scr.*	
47	10410		Spring Bracket	
48	761-0167		Disc Brake Ass'y.—Comp.	
49	HU-37-13818		Nut	
50	710-0258		Hex Scr. ¼-20 x .62" Lg.*	
51	HU-39-13774		Pin, Actuator	
52	HU-37-13821		Bolt	
53	HU-39-13946		Spacer	
54	HU-16-13807		Anvil	
55	HU-39-14097		Housing with Lever and Groove Pin	
56	HU-37-9238		Lock Nut	
57	HU-24-13772		Lining	
58	HU-39-13775		Pin, Adjuster	
59	13457		Rear Axle Plate	
60	710-0437		Chain Adj. Link 5/16-18 x 4.38" Lg.	
61	741-0199		Plastic Flange Brg. w/Flats .753 I.D.	
62	712-0267		Hex Nut 5/16-18 Thd.*	
63	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
64	10360		Axle Bolt Plate Ass'y.	
65	13455		Rear Axle Brkt. Ass'y.	
66	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*	
67	713-0239		#420 Chain ½" Pitch x 89 Links	
	713-0154		#420 Master Link	
68	717-0222		Single Speed Trans. Ass'y.	
69	710-0412		Hex Bolt ¼-28 x .75" Lg.	
70	720-0165		Ball Knob—Black	
71	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*	
72	10396		Trans. Support Brkt. Ass'y.	
73	750-0289		Spacer .50" I.D. x .27" Lg.	
74	732-0388		Spring .38 O.D. x 6.62"	
75	736-0264		Fl-Wash. .344 I.D. x .62 O.D.	
78	09963		Hitch Brkt.	
79	761-0168		Blade Brake Ass'y. 1.90 High	
80	736-0921		L-Wash. ½" Scr.*	
81	12705		Variable Sp. Eccenter Ass'y.	
82	11070		Variable Sp. Plate Ass'y.	
83	711-0571		Pivot Pin	
84	726-0106		Push Nut ¼" Rod	
85	12710		Variable Spd. Control Brkt.	
86	735-0201		Brake Pedal Pad	
87	735-0201		Clutch Pedal Pad	
88	736-0140		Fl-Wash. .385 I.D. x .62 O.D. x .063	
89	736-0232		Wave Wash. .530 I.D. x .78 O.D. x .013	
90	11095		Engine Brace	
91	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
92	736-0119		L-Wash. 5/16" Scr.*	
93	712-0267		Hex Nut 5/16-18 Thd.*	
94	712-0138		Hex Nut ¼-28 Thd.	
95	14219		Brake Pedal Ass'y.	
96	11039		Pedal U-Brkt. Ass'y.	
97	11853		Trans. Shift Lever	
98	11090		Lower Frame Ass'y.	

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(486—Star Orange)

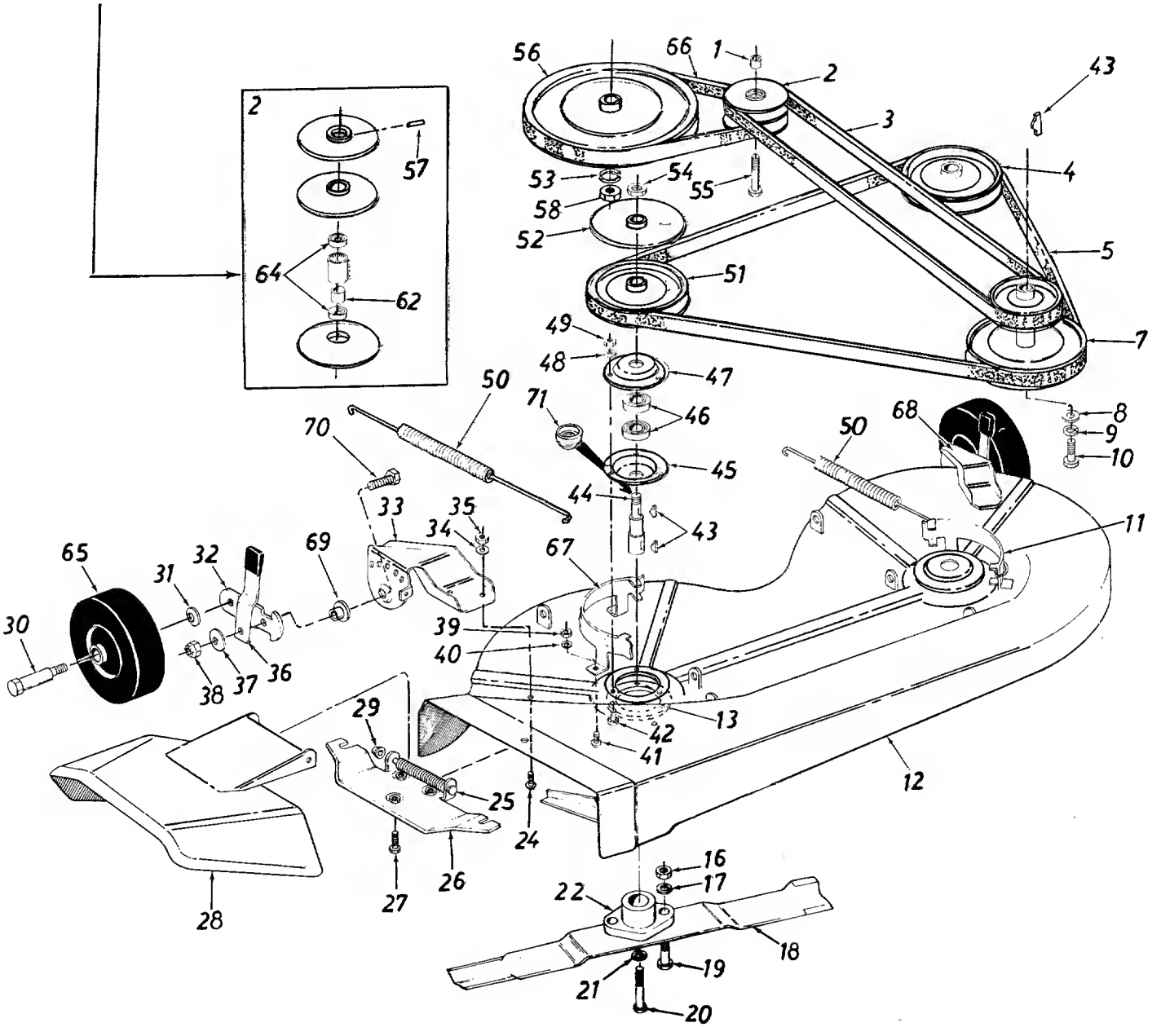
When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Star Orange Finish—13322 (486).)

Models 465 and 466

IMPORTANT

Belts listed by part number are of special construction and should be used when replacement is necessary. The dimensions and description given are for general reference only and belts purchased by description and dimension generally will only provide temporary service.

NOTE: If unit does not respond to speed control lever, it is possible that the variable speed pulley is seizing. Apply a few drops of light oil to each side of the assembly to loosen. Reapply dry lubricant. Do not get lubricant on belts. It is not necessary to dismantle to apply lubricant.



Models 465 and 466

PARTS LIST FOR MODELS 465 AND 466 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	711-0494		Spacer .510 I.D. x .760 O.D. x .390	
2	717-0473		Variable Spd. Pulley Ass'y.	N
3	754-0138		"V"-Belt 21/32 x 50" Lg.	
4	756-0251		Pulley 4.75 O.D. (Deck)	
5	754-0151		"V"-Belt 21/32 x 67" Lg.	
7	756-0307		Two Step Engine Pulley	
8	736-0235		Fl-Wash. .406 I.D. x 1.25 O.D.	
9	736-0169		L-Wash. 3/8" Scr.*	
10	710-0151		Hex Hd. Cap Scr. 3/8-24 x 2.00"—Grade 5	
11	12672		Belt Guard—L.H. (Deck)	
12	14658		34 In. Deck Ass'y.	N
13	09164		Deck Reinforcement Plate	
16	712-0123		Hex Nut 5/16-24 Thd.*	
17	736-0119		L-Wash. 5/16" Scr.*	
18	742-0120		17.0 In. Blade	
19	710-0117		Hex Bolt 5/16-24 x 1.00" Lg. H.T.	
20	710-0459		Hex Bolt 3/8-24 x 1.50" Lg. H.T.	
21	736-0217		L-Wash. 3/8" Scr. H.D.	
22	10769		Blade Adapter Kit	
24	710-0289		Hex Hd. Cap Scr. ¼-20 x .50" Lg.*	
25	711-0571		Pivot Pin	
26	11399		Adapter Plate Ass'y.	
27	710-0195		Hex Bolt ¼-28 x .62" Lg.*	
28	11633		Chute Cover Ass'y. Comp.	
29	726-0106		Push Nut ¼" Rod	
30	738-0373		Shld. Scr. .459 Dia. x 1.53" Lg.	
31	736-0105		Belleville Washer	
32	10937		Wheel Pivot Bar	
33	09080		Wheel Brkt. Ass'y.—R.H. (Deck)	
34	736-0329		L-Wash. ¼" Scr.*	
35	712-0287		Hex Nut ¼-20 Thd.*	
36	14082		Spring Lever Ass'y. w/Knob	
37	736-0219		Belleville Washer	
38	712-0181		Hex Jam L-Nut 3/8-16 Thd.	
39	712-0287		Hex Nut ¼-20 Thd.*	
40	736-0329		L-Wash. ¼" Scr.*	
41	710-0289		Hex Hd. Cap Scr. ¼-20 x .50" Lg.*	
42	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
43	714-0365		#6 Hi-Pro Key 5/32 x 5/8" Dia.	
44	711-0255		Blade Spindle	
45	08253		Bearing Housing	
46	741-0919		Ball Brg. .787 I.D. x 1.85 O.D.	
47	08253		Bearing Housing	
48	736-0329		L-Wash. ¼" Scr.	
49	712-0287		Hex Nut ¼-20 Thd.*	
50	732-0307		Spring .75 O.D. x 11.0" Lg. (Deck)	
51	756-0251		Pulley 4.75 O.D. (Deck)	
52	09322		Blade Brake Disc	
53	736-0921		L-Wash. ½" Scr.*	
54	712-0261		Hex Jam Nut 5/8-11 Thd.	
55	710-0515		Hex Hd. Cap Scr. ½-20 x 3.50" Lg.*	
56	756-0174		Trans. Split Pulley .50" I.D.	
57	715-0124		Spring Pin Spiral 5/32" Dia. x .62" Lg.	
58	712-0922		Hex Jam Nut ½-20 Thd.*	
61	750-0144		Steel Tubing	
62	750-0516		Spacer	
64	741-0139		Ball Brg. .50 I.D. x 1.38 O.D.	
65	734-0973		Wheel Ass'y. 5.0" Dia. (Deck)	
66	754-0136		V-Belt 21/32 x 31" Lg.	
67	12673		Belt Guard—R.H. (Deck)	
68	09082		Wheel Brkt. Ass'y.—L.H. (Deck)	
69	748-0279		Shoulder Spacer	
70	710-0342		Hex Bolt 3/8-16 x 1.00" Lg.*	
71	13703		Bearing Shield	
	14782		34" Deck Ass'y. Comp. (For Service Only)	N

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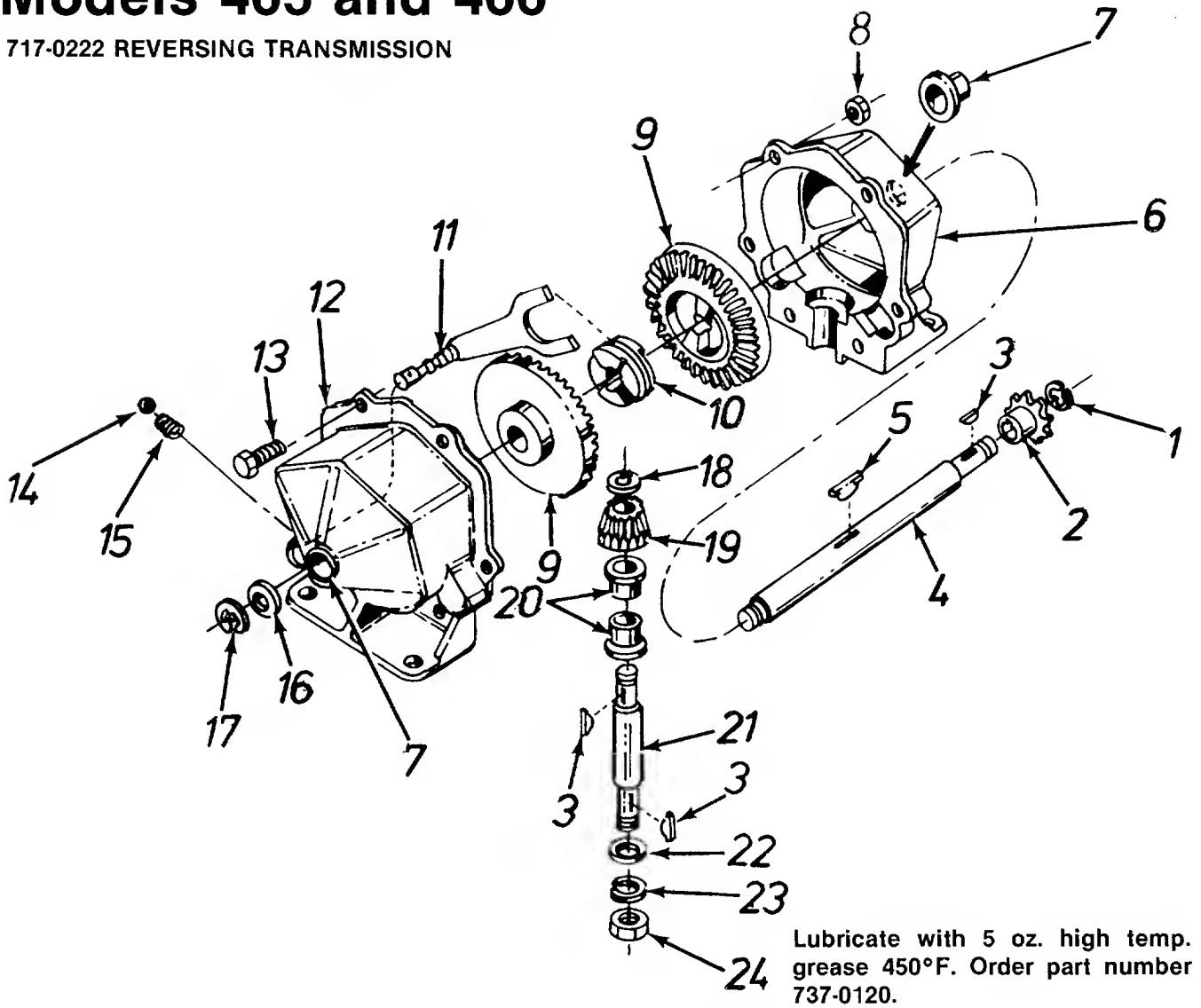
(486—Star Orange)

When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Star Orange Finish—13322 (486).)

Models 465 and 466

717-0222 REVERSING TRANSMISSION



Lubricate with 5 oz. high temp. grease 450°F. Order part number 737-0120.

PARTS LIST FOR REVERSING TRANSMISSION 717-0222

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.		DESCRIPTION
1	716-0104	E-Ring for .500″ Dia. Shaft		14	741-0862	Detent Ball
2	748-0204	#41 Sprocket Center 8 Tooth		15	732-0863	Detent Spring
3	714-0129	#4 Hi-Pro Key 3/32 x 5/8″ Dia.		16	736-0116	Fl-Wash. .635 I.D. x .93 O.D.
4	711-0854	Output Shaft		17	716-0106	E-Ring for .625″ Dia. Shaft
5	714-0126	#9 Hi-Pro Key 3/16 x 3/4″ Dia.		18	716-0865	Snap Ring for .500″ Dia. Shaft
6	717-0123	Transmission Case—L.H. Complete		19	748-0866	Pinion Gear
7	748-0855	Flange Bearing		20	748-0867	Bearing .627 I.D.
8	712-0117	Hex Cent. L-Nut ¼-28 Thd.		21	738-0159	Pinion Shaft
9	748-0856	Bevel Gear		22	736-0192	Fl-Wash. .531 I.D. x .93 O.D.
10	748-0857	Clutch Collar		23	736-0921	L-Wash. ½″ Scr.*
11	08583	Shift Yoke Ass'y.		24	712-0922	Hex Jam Nut ½-20 Thd.
12	717-0124	Transmission Case—R.H.—Comp. (With Detent Hole)		—	737-0120	Grease—High Temp. 450°F. (5 oz.)
13	710-0195	Hex Bolt ¼-28 x .62″ Lg.*		—	717-0222	Transmission Complete

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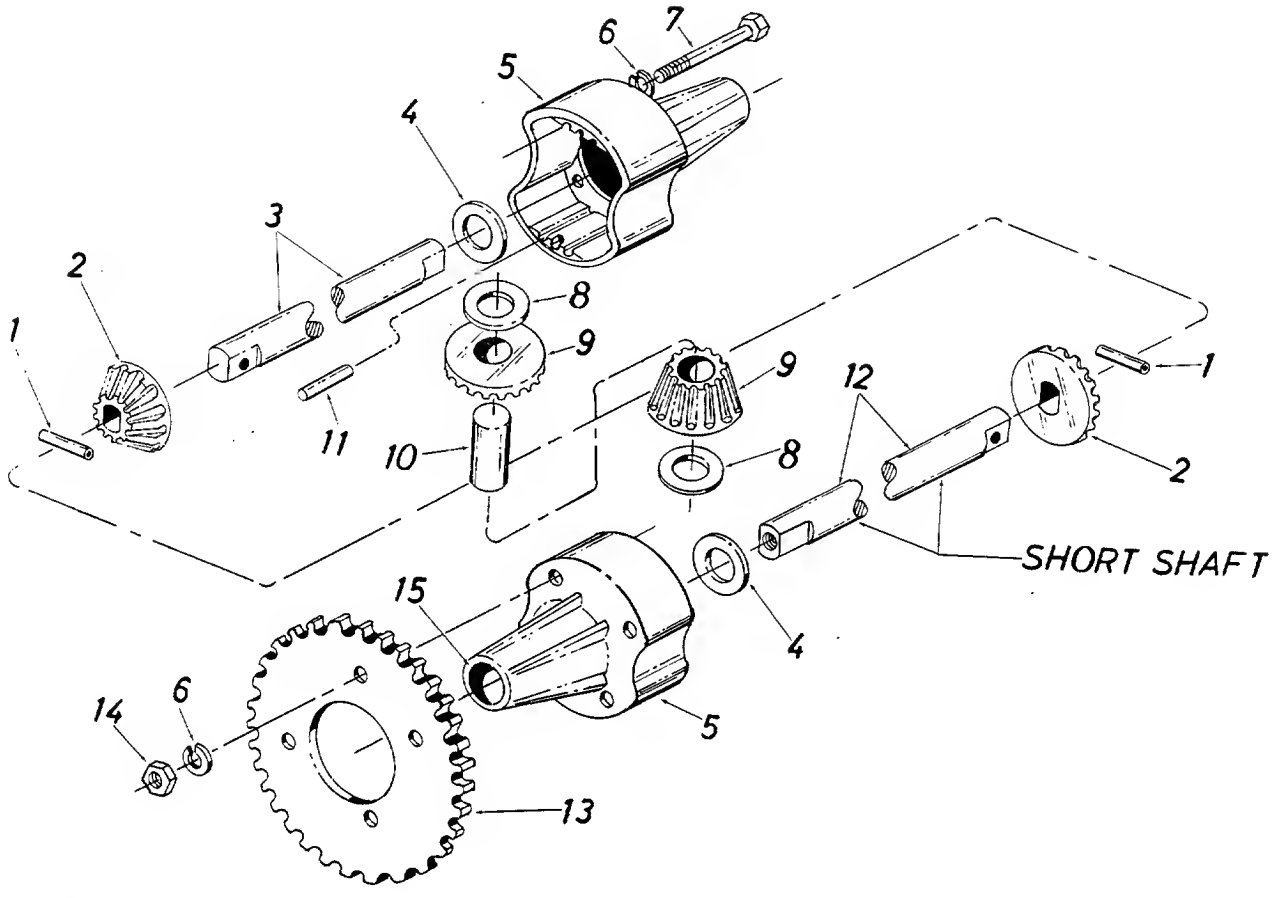
Models 465 and 466

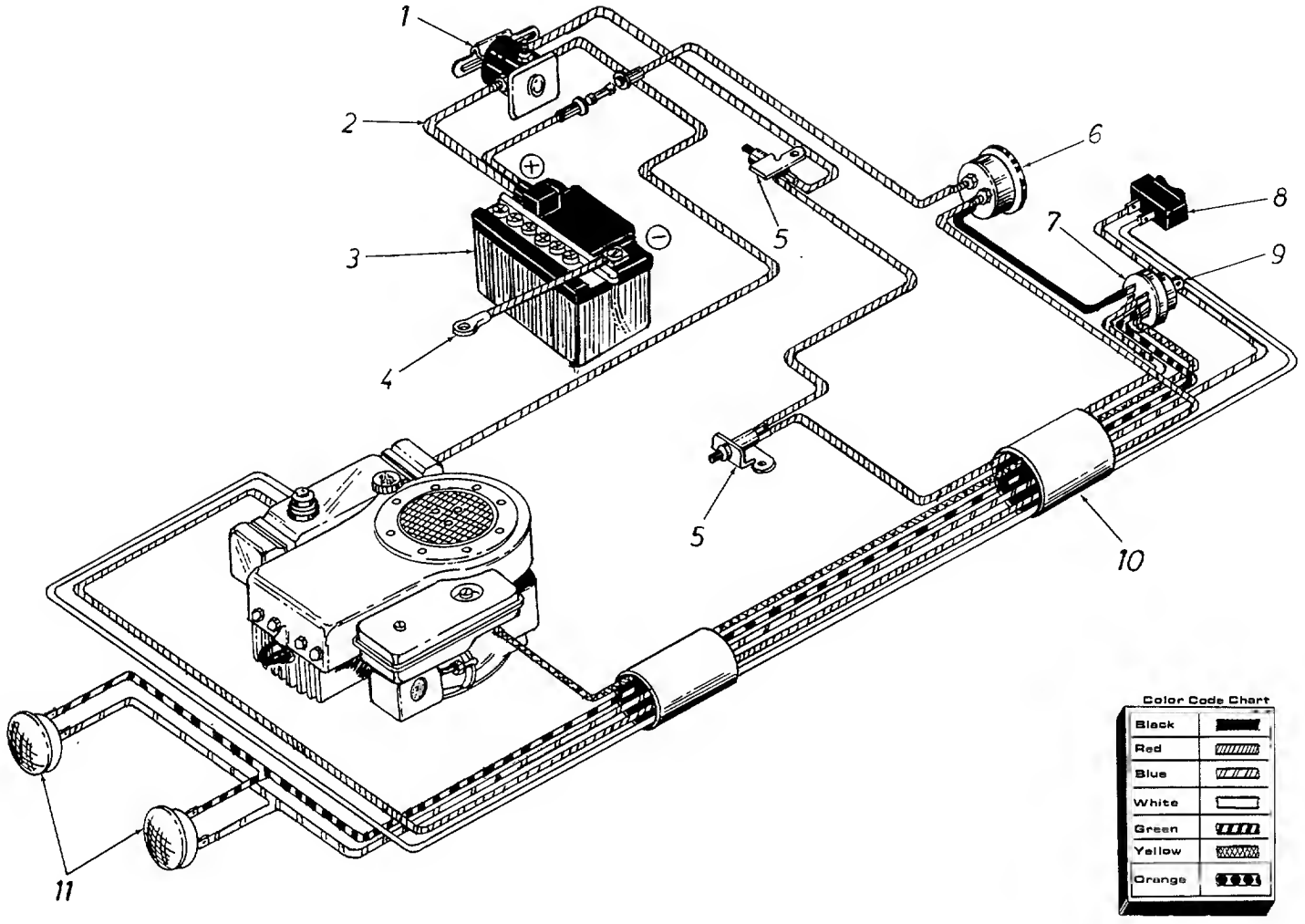


Lubricate with 3 oz. of High Temp. Grease Plastilube #0. Order Part No. 737-0166.

PARTS LIST FOR DIFFERENTIAL ASSEMBLY 717-0314

REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION
1	715-0247	2	Spring Pin Spiral 3/16" Dia. x 1.00" Lg.
2	748-0185	2	Gear—Double "D" Hole
3	738-0250	1	Shaft (Long)— 17.01" Lg.
4	736-0188	2	Fl-Wash. .760 I.D. x 1.49 O.D.
5	719-0150	2	Housing Half
6	736-0119	8	L-Wash. 5/16" I.D.*
7	710-0526	4	Hex Bolt 5/16-24 x 4.00" Lg.
8	736-0187	2	Fl-Wash. .640 I.D. x .24 O.D.
9	748-0158	2	Gear—Round Hole
10	711-0276	1	Drive Pin
11	715-0123	2	Dowel Pin 3/16" Dia. x .62" Lg.
12	738-0249	1	Shaft (Short)—9.65 Lg.
13	09133	1	Sprocket—60 Teeth
14	712-0237	4	Hex Cent. L-Nut 5/16-24 Thd.
15	748-0169	2	Flange Bearing

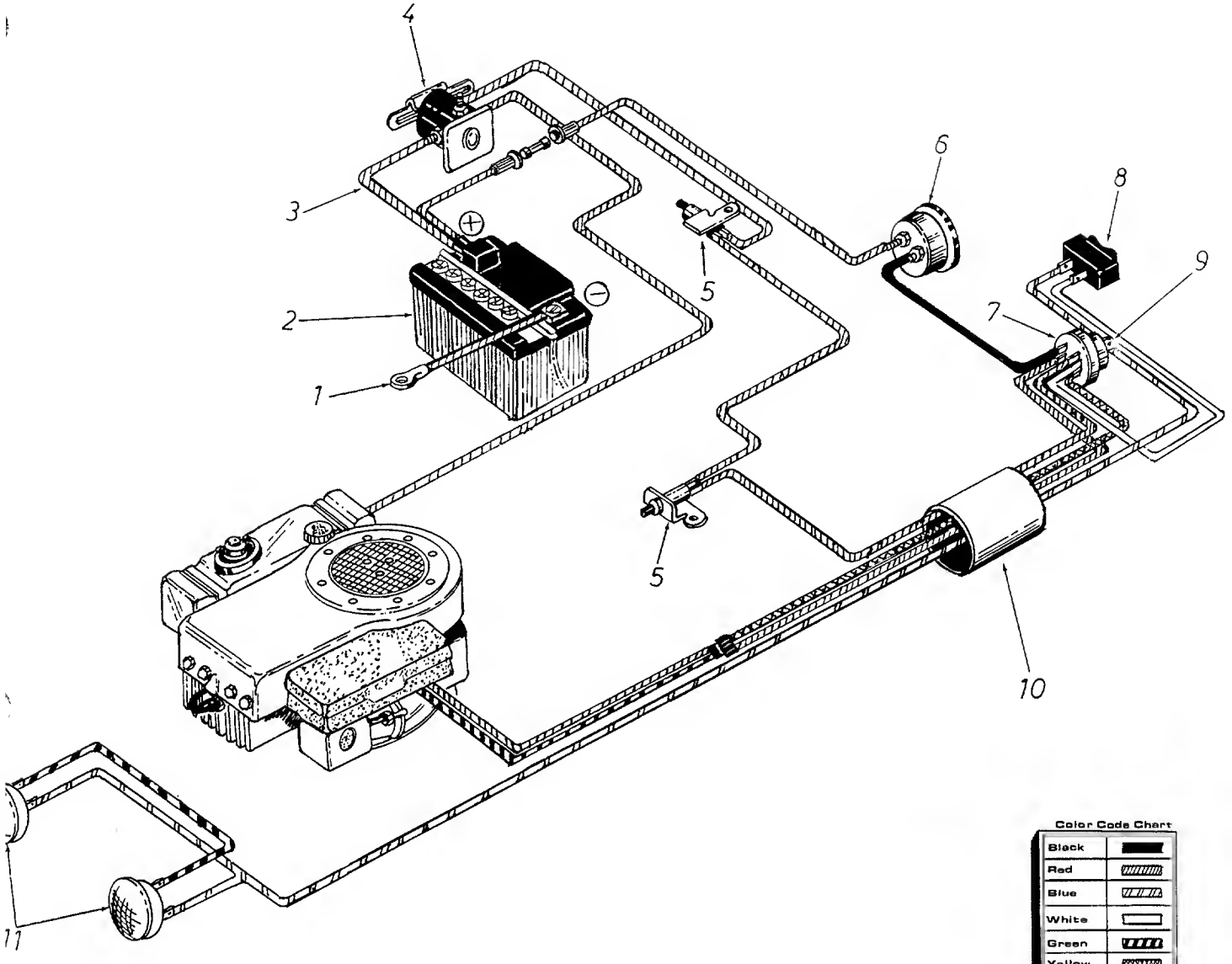
Model 465 Only



BRIGGS AND STRATTON ENGINE
ELECTRICAL SYSTEM FOR MODEL 465
LAWN TRACTOR ONLY

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0771	Solenoid	N
2	725-0221	Electric Wire	
3	725-0514	Battery	
4	725-0122	Electric Wire	
5	725-0268	Safety Switch—Black—N.O.	
6	725-0119	Ammeter	
7	725-0267	Ignition Switch	
8	725-0646	Headlight Switch	
9	725-0201	Ignition Key	
10	725-0738	Wire Harness	
11	725-0744	Headlights	

Model 466 Only



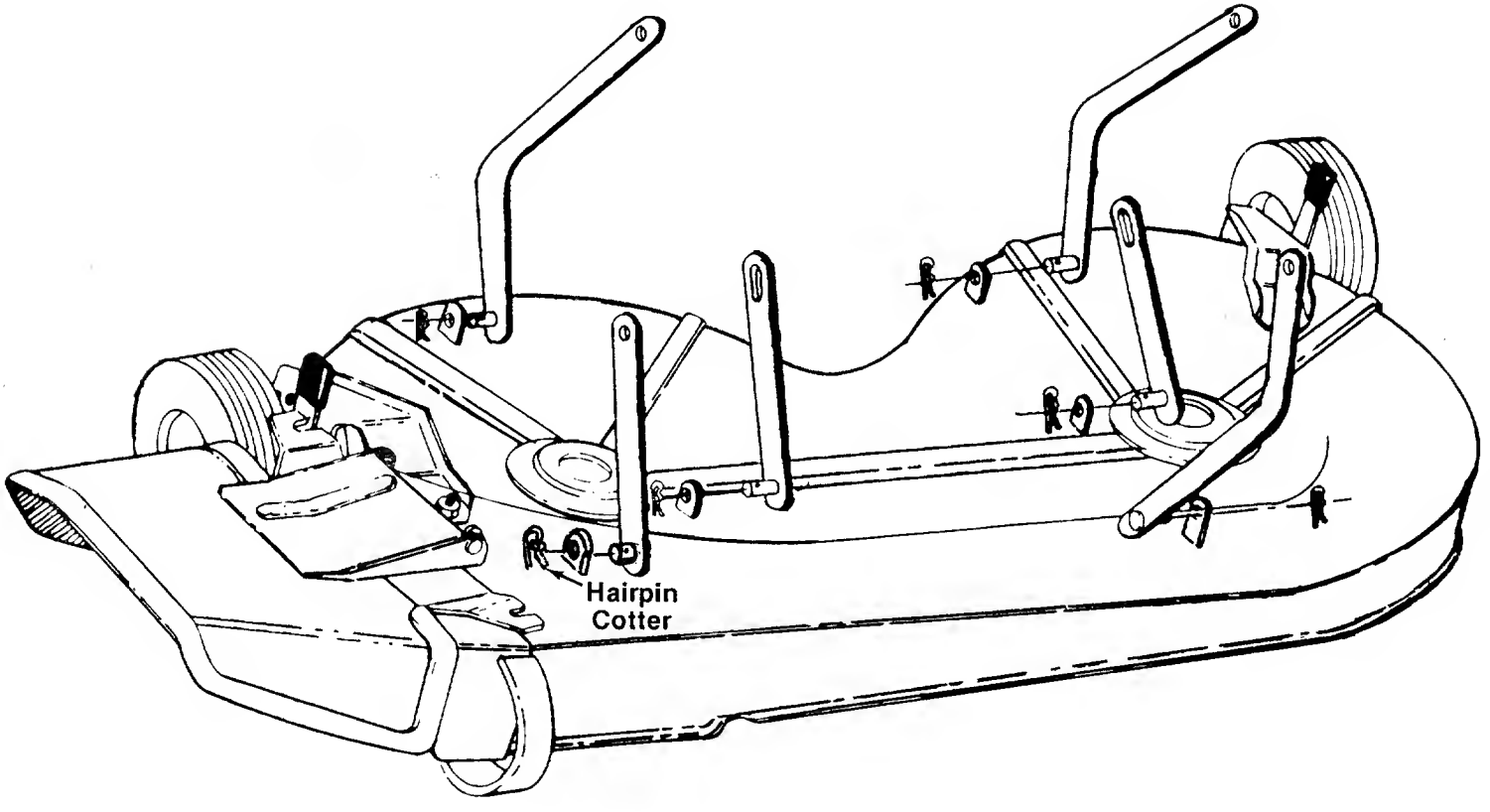
TECUMSEH ENGINE ELECTRICAL SYSTEM FOR MODEL 466 LAWN TRACTOR ONLY

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0122	Electric Wire	
2	725-0514	12V-Battery	
3	725-0422	Electric Wire	
4	725-0771	Solenoid	N
5	725-0268	Safety Switch—Black—N.O.	
6	725-0119	Ammeter	
7	725-0380	Ignition Switch	
8	725-0646	Headlight Switch	
9	725-0201	Ignition Key	
10	725-0659	Wire Harness	
11	725-0744	Headlights	

DECK LINKAGE

NOTE

Refer to illustration below for proper deck link hookup. If the deck is removed for any reason use the illustration below for correct assembly.



PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline,** Briggs & Stratton or Tecumseh Lauson.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA	**BIRMINGHAM**	
Auto Electric & Carburetor Co.	2625 4th Ave. S.	35233
ARKANSAS	**FORT SMITH**	
Mity Mite Motors, Inc.	4515 S. 16th St.	72901
	NORTH LITTLE ROCK	
Sutton's Lawn Mower Shop	Rt. 4, Box 368	72117
CALIFORNIA	**PORTERVILLE**	
Billious	75 North D Street	93257
COLORADO	**DENVER**	
Spitzer Industrial Products Co.	6601 N. Washington St., Box 29114	80229
FLORIDA	**JACKSONVILLE**	
Radco Distributors	4909 Victor St., Box 5459	32207
	OPA LOCKA	
Small Eng. Dist.	2351 N.W. 147th St.	33054
GEORGIA	**EAST POINT**	
East Point Cycle & Key	2834 Church St.	30344
ILLINOIS	**LYONS**	
Keen Edge Co.	8615 Ogden Ave.	60534
INDIANA	**ELKHART**	
Parts & Sales Inc.	2101 Industrial Pkwy.	46514
IOWA	**DUBUQUE**	
Power Lawn & Garden Equip.	2551 J.F. Kennedy	52001
LOUISIANA	**NEW ORLEANS**	
Suhren Engine Co.	8330 Earhart Blvd.	70118
MARYLAND	**TAKOMA PARK**	
Center Supply Co.	6867 New Hampshire Ave.	20012
MASSACHUSETTS	**SPRINGFIELD**	
Morton B. Collins Co.	300 Birnie Ave.	01107
MICHIGAN	**LANSING**	
Lorenz Service Co.	2500 S. Pennsylvania	48910
	MOUNT CLEMENS	
Power Equipment Dist.	340 Hubbard	48043
MINNESOTA	**HOPKINS**	
Hance Distributing Inc.	420 Excelsior Ave. W.	55343
MISSISSIPPI	**BILOXI**	
Biloxi Sales & Service, Inc.	506 Caillavet St.	39533
MISSOURI	**KANSAS CITY**	
Automotive Equip. Service	3117 Holmes St.	64109
	ST. JOSEPH	
Ross-Frazier Supply Co.	8th and Monterey	64503
	ST. LOUIS	
Henzler, Inc.	2015 Lemay Ferry Rd.	63125
NEW JERSEY	**BELLMAWR**	
Lawnmower Parts Inc.	717 Creek Rd.	08030
NEW MEXICO	**ALBUQUERQUE**	
Spitzer Eng. & Parts	1023 Third St. N.W.	87103
NEW YORK	**CARTHAGE**	
Gamble Dist., Inc.	West End Ave.	13619
NORTH CAROLINA	**GOLDSBORO**	
Smith Hardware Co.	515 N. George St.	27530
	GREENSBORO	
Dixie Sales Company	335 N. Green	27402
OHIO	**CARROLL**	
Stebe's Mid-State Mower Supply	71 High St., Box 366	43112
	CLEVELAND	
Bleckrie, Inc.	7900 Lorain Ave.	44102
	WADSWORTH	
National Central	687 Seville Rd.	44281
	YOUNGSTOWN	
Burton Supply Co.	1301 Logan Ave., Box 929	44501
OKLAHOMA	**MUSKOGEE**	
Victory Motors, Inc.	605 S. Cherokee	74401
OREGON	**PORTLAND**	
Kenton Supply Co.	8216 N. Denver Ave.	97217
PENNSYLVANIA	**HARRISBURG**	
EECO Inc.	4021 N. 6th St.	17110
	PHILADELPHIA	
Thompson Rubber Co.	5222-24 N. Fifth St.	19120
	PITTSBURGH	
Bluemont Co.	11125 Frankstown Rd.	15235
	PUNXSUTAWNEY	
Frank Roberts & Sons	R.D. 2	15767
TENNESSEE	**KNOXVILLE**	
Master Repair Service	2000 Western Ave.	37921
	MEMPHIS	
American Sales & Service, Inc.	3035-43 Bellbrook	3811
TEXAS	**DALLAS**	
Marr Brothers, Inc.	423 E. Jefferson	75203
	FORT WORTH	
Woodson Sales Corp.	1702 N. Sylvania	76111
	HOUSTON	
Bullard Supply Co.	2409 Commerce St.	77003
UTAH	**SALT LAKE CITY**	
A-1 Engine & Mower Co.	437 E. 9th St.	84111
VERMONT	**BURLINGTON**	
Vermont Hdwe. Co. Inc.	180 Flynn Ave.	05401
VIRGINIA	**ASHLAND**	
RBI Corp.	Lake Ridge Park, 101 Cedar Run Dr.	23005
WASHINGTON	**SEATTLE**	
Bailey's Inc.	1414 14th Ave.	98102
WEST VIRGINIA	**CHARLESTON**	
Young's, Inc.	233 Virginia St., E.	25301
WISCONSIN	**MARSHFIELD**	
Power Pac	301 E. 29th St.	54449

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. **Replacement of Missing Parts** on new equipment.
2. **Replacement of Defective Parts** within the warranty period.
3. **Repair of Defects** within the warranty period.

All claims MUST be substantiated with the following information:

1. **Model Number** of unit involved.
2. **Date** unit was purchased or first put into service.
3. **Date of failure.**
4. **Nature of failure.**